

English

Projection TV
OPERATING MANUAL

Let's make things better.



PHILIPS



Contents

Remote control	3	Connecting other equipment	43
Front Controls	4	Playback from VCR.....	43
Back connection	5	Playback from Laser disc player, CD-I etc.....	44
Setting up the remote control and TV	6	Amplifier connection.....	44
Before Calling Service	7	Recording.....	45
Safety precaution	9	Frequency tables	46
On-Screen menu controls	11	Specifications	49
General TV controls	12		
Select menu languages	13		
Automatic Installation	14		
Manual Installation	15		
Give Name	17		
TV Configuration	19		
Reshuffle	20		
Favourite Programmes	21		
Picture Adjustment	22		
Contrast.....	22		
Brightness.....	22		
Colour.....	22		
Tint.....	22		
Sharpness.....	22		
White tone	22		
Sound Adjustment	23		
Balance.....	23		
Treble.....	23		
Bass.....	23		
Sound only.....	23		
Features	24		
Pip.....	25		
Sleeptimer.....	25		
Child Lock.....	26		
Message.....	26		
Timers.....	29		
Convergence.....	30		
Picture enhancement features	31		
Incredible picture.....	31		
DNR.....	31		
Stereo sound	32		
Stereo enhancement features	33		
Incredible sound.....	33		
Spatial sound.....	33		
Smart controls	34		
VCR controls	35		
Picture In Picture (PIP)	36		
Teletext	38		
Subtitle Txt	42		

NOTE: This owner's manual is used with several different television models. Not all features (and drawings) discussed in this manual will necessarily match those found with your television set. This is normal and does not require you contacting your dealer or requesting service.

English



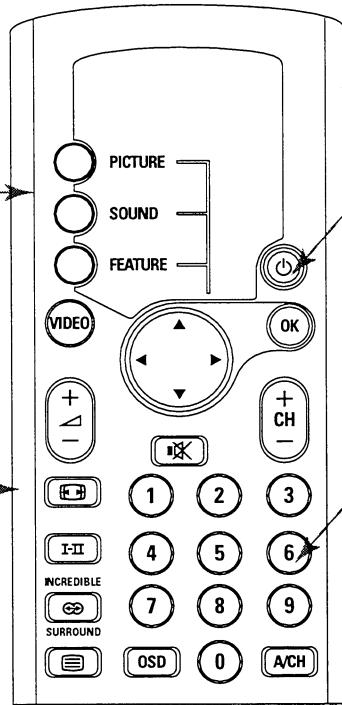
Remote control

- PICTURE select picture menu
- SOUND select sound menu
- FEATURE select feature menu

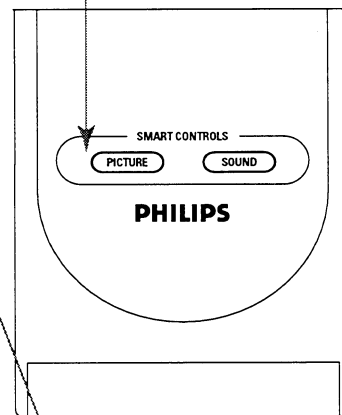
- select external connection
- select volume level
- not applicable
- switch sound mode
- select "incredible sound"

- Teletext:
- on/off Teletext
 - coloured keys -fast select pages
 - select index page
 - display time
 - reveal solution
 - hold sub-pages
 - enlarge page
 - interrupt teletext

- not applicable
- reduce picture interference
- not applicable
- switch on "incredible picture"
- switch on subtitle



- switch to "stand-by"
- confirm your choice
- select your choice
- select channel
- "mute" sound
- select digits
- select previous channel display on screen information
- select "SMART" picture
- select "SMART" sound



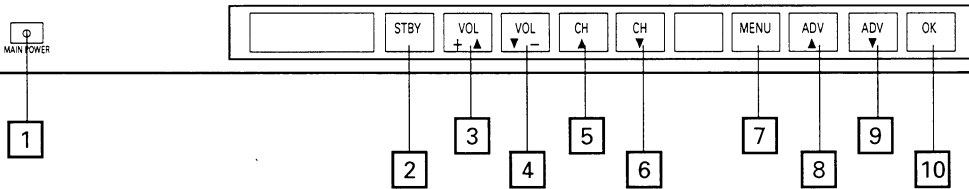
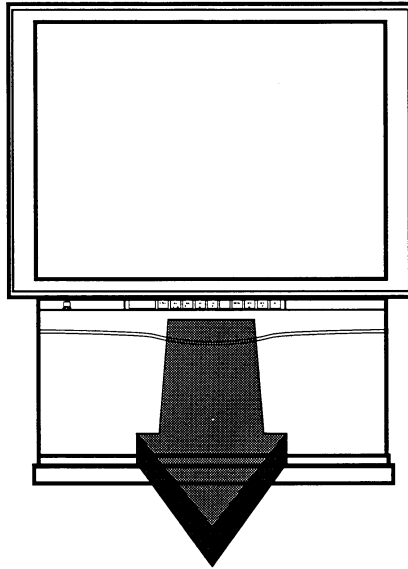
- PIP :
- ON/OFF on/off PIP
 - SOURCE select PIP source
 - POSITION move PIP screen
 - PROGRAM select PIP channel
 - +/- not applicable
 - SCAN not applicable
 - SWAP switch PIP screen
 - STILL freeze PIP screen

- VCR :
- stop tape
 - rewind tape
 - record onto tape
 - forward tape
 - play tape

English



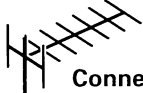
Front Controls



Button no.	Function
1	Switch on/off TV.
2	Switch on/off TV from standby.
3	Dual function :- a) Increase volume of sound. b) When a menu is active, move cursor to the left.
4	Dual function :- a) Decrease volume of sound. b) When a menu is active, move cursor to the right.
5	Select a higher channel number.
6	Select a lower channel number.
7	Call up the main menu.
8	Move cursor up in a menu.
9	Move cursor down in a menu.
10	Move to a higher level menu.

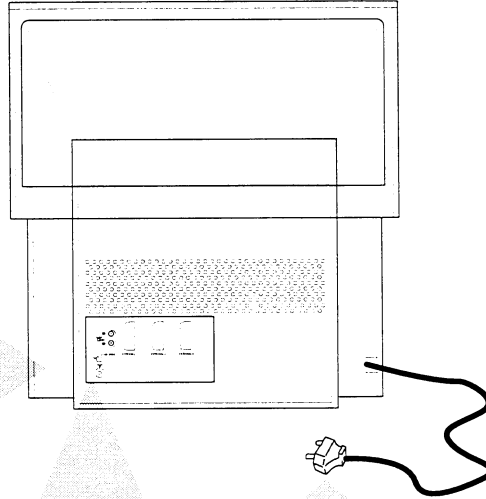
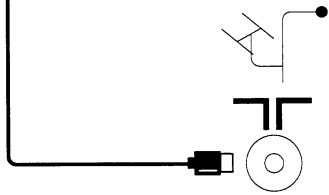


Back connection

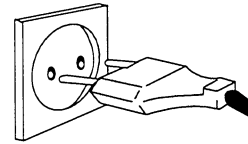


Connect your aerial cable

Insert the aerial plug tightly into the aerial socket at the back of the TV with an aerial cable of good quality. Consult your local dealer if you have any queries or need any assistance on connection.



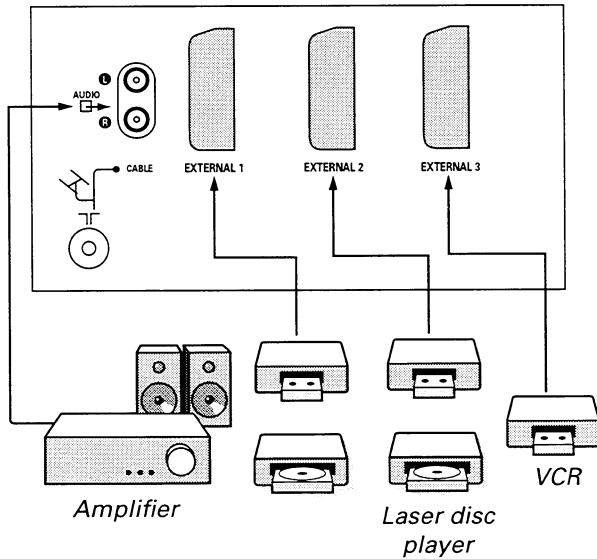
English



Connect to power

Refer to the specification page for the correct operating voltage. Consult your local dealer if your mains supply is different.

- Connect your television to the mains supply socket and switch on. (Diagram is only a representation of the actual plug and socket)



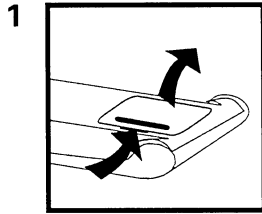
Audio Video connection

Refer to the section on "Connecting other equipment" at the back of this manual for details.

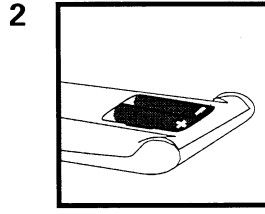


Setting up the remote control and TV

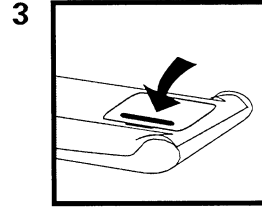
Setting up the remote control



1 Remove the battery cover at the back of your remote control.



2 Insert two batteries (Type AAA, 1.5 V) into the compartment.




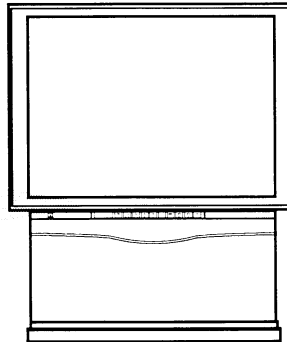
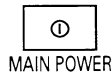
3 Replace the cover.

Note :

- Remove the batteries from the remote control if you do not use it for an extended period. This is to prevent possible damage due to battery leakage.
- Make sure that there is no obstruction between the remote control and the television.
- Do not use old and new batteries together.

Setting up the TV

- Press the power knob  button on the front, bottom left of your television. A green or red indicator light appears.



If the indicator light is GREEN, it means:

Your television is switched ON. Wait a few seconds for the screen to light up. If no signal input is detected, you will see a blue screen with the word "PHILIPS."

If the indicator light is RED, it means:

Your television is switched on but the screen stays dark. Your television is on 'standby.'

- Press any digit button, **CH +** or **-** button, **A/CH** button or **VIDEO** button on your remote control. The screen lights up. If no signal input is detected, you will see a blue screen with the word "PHILIPS."

Note : If there is no signal detected after about 10 minutes, your television will switch over to standby.




Before Calling Service

Caution:

Avoid displaying stationary images on your TV screen for an extended period of time. Stationary patterns generated by the PIP display, computer displays, teletext, etc., can become permanently ingrained on the picture tube. This damage is not protected by your warranty as it is a result of misuse. If you need to display still images, it is always advisable to reduce the brightness and contrast settings or alternate with normal TV viewing.

Please make these simple checks before calling service. These tips can save you time and money since charges for TV installation and adjustments of customer controls are not covered under your warranty.

English

Symptoms	Items to Check and Actions to follow
'Ghosts' or double images or teletext garbled	This may be caused by obstruction to the antenna due to high rise buildings or hills. Using a highly directional antenna may improve the picture.
No Power	<ul style="list-style-type: none"> • Check that the TV's AC power cord is plugged into mains socket. • Unplug the TV, wait for 60 seconds. Then re-insert plug into the mains socket and switch on the TV again.
No picture	<ul style="list-style-type: none"> • Check antenna connections at the rear of the TV to see if they are properly connected to the TV input terminal. • Possible TV station trouble. Try another channel. • Adjust the contrast and brightness settings
Good picture but no sound	<ul style="list-style-type: none"> • Increase the VOLUME. • To check that the TV is not muted, press the  button on the remote control. • When no TV signal is detected, the TV automatically mutes the sound. This is a proper set operation and does not indicate a malfunction. • Check that you have selected a suitable sound system in "Manual Installation" for this channel.
Good sound but poor or abnormal colour or no picture	<ul style="list-style-type: none"> • Adjust the contrast and brightness setting.
Snowish picture and noise	<ul style="list-style-type: none"> • Check the antenna connection.
Horizontal dotted lines	<p>This may be caused by electrical interference (e.g. hairdryer, nearby neon lights, etc.).</p> <ul style="list-style-type: none"> • Switch off the equipment.
One white line across the screen	<ul style="list-style-type: none"> • Switch off the TV immediately and consult the service personnel.



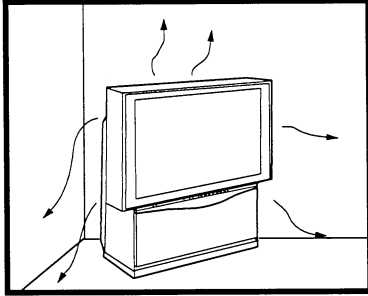
... before calling service

Symptoms	Items to Check and Actions to follow
TV not responding to remote control	<ul style="list-style-type: none">• Check batteries and replace them if necessary.• Clean the remote control sensor lens on the TV.• Operating range between TV and remote control should not be more than 6 metres.
NICAM sound distortion (crackling noise)	<p>This could be due to the antenna siting or reflected signal.</p> <ul style="list-style-type: none">• Switch over to the "NICAM Mono" mode by pressing the HI button.
Blue or red colour appears around the edges of picture	<p>The convergence of the picture has probably drifted.</p> <ul style="list-style-type: none">• Select the "FEATURES" menu and select "Convergence." Adjust accordingly.
No On-Screen-Display	<ul style="list-style-type: none">• Check that you are not in the "Teletext" mode or "Subtitle Txt" mode. To see the On-Screen-Display, exit from this mode.

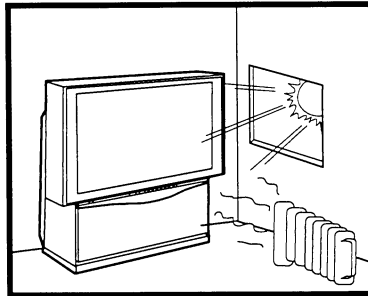
English



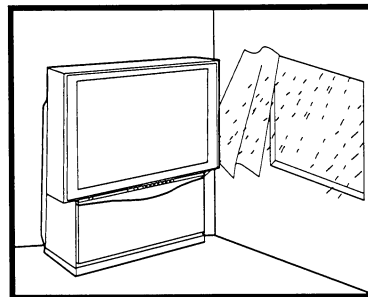
Safety precaution



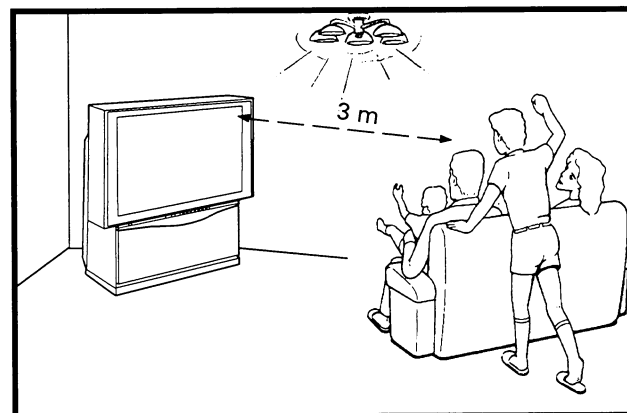
- Leave sufficient space for ventilation.
- Place on flat ground. Do not hang or mount the TV to the wall.



Avoid heat and direct sunlight.



Avoid exposure to rain or water.

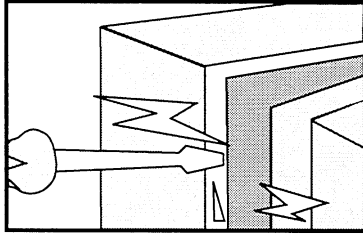


- Watch TV from a distance.
- Maintain sufficient lighting.
- Be considerate to your neighbours when you adjust the volume of your TV.

English



... safety precaution



Never repair the TV yourself-get a skilled personnel!

English



Clean with the "Enhanced Screen Cleaning Kit"

Your projection TV's screen is made up of thousands of vertical ridges that help enhance and define the colour TV images. These ridges can collect airborne dust which will reduce the clarity and brightness of your TV picture. To clean your TV screen effectively, it is recommended that you purchase an "Enhanced Screen Cleaning Kit" (with anti-static cleaner and magnetic cleaning cloth) from your dealer.

How to use the cleaning kit :

The magnetic cleaning cloth works well alone to remove dust from your screen. If the screen is very dirty from smudges and residue, then the screen cleaning fluid should be used.

Note : Do not spray the fluid directly onto the screen. Apply directly to the magnetic cloth and wipe onto the screen's vertical ridges with a top-to-bottom downward motion stroke.

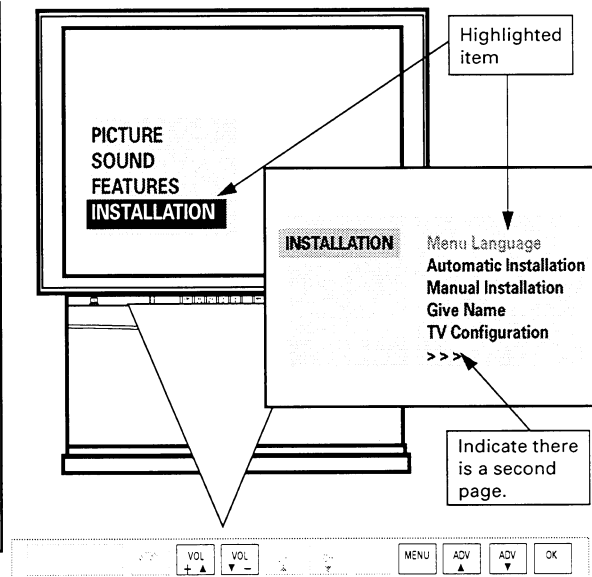


On-Screen menu controls

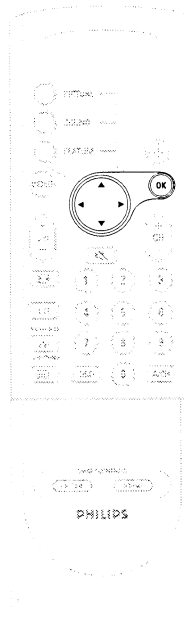
Features of your TV can be adjusted from a "MENU" screen shown on the TV. Alternatively, you can also use the button on the remote control with the same name as the menu, e.g. press **PICTURE** button to call up the "PICTURE" menu directly. A menu is an on-screen list of features. Each item on the menu can be adjusted by pressing buttons on the TV control or the remote control.

1. Press **MENU** button on the TV control to call up the main menu.
2. Move cursor up or down to highlight an item.
3. Select the item and perform adjustment.
4. Go back to previous screen or clear screen.

Function	on TV	on RC
Call up main menu	MENU	--
Move cursor up	ADV ▲	▲
Move cursor down	ADV ▼	▼
Select an item or adjust a feature control.	VOL + or VOL -	◀ or ▶
Move to the previous screen or clear screen.	OK	OK



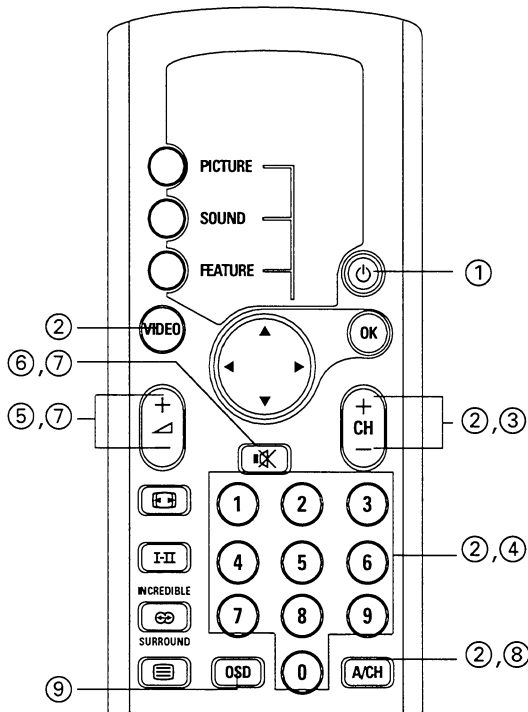
English





General TV controls

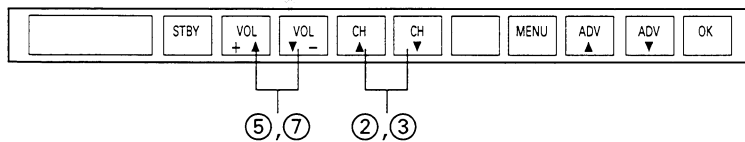
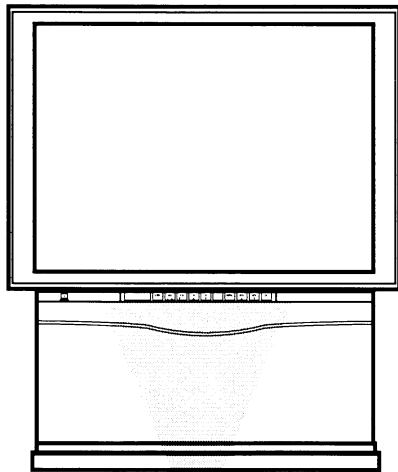
English



Remote Control

Function of controls :

- ① Switch off your television temporarily (standby).
A red indicator light appears on the front of the television.
- ② Switch on again from standby.
- ③ Select a higher or lower channel numbers. The numbers must be in the "Favourite Programme" list.
- ④ Key in channel number directly. For 2-digit channel number, you have to complete keying in within 2 seconds.
- ⑤ Adjust volume.
- ⑥ Switch off sound temporarily.
- ⑦ Switch on sound again.
- ⑧ Switch between last viewed and current channel number.
- ⑨ Switch on or off on screen information such as picture mode, status of DNR, channel number and name and sound mode.
Note : For permanent display of channel number, press button for more than 4 seconds.



TV Control



Select menu languages

With the "Menu Language" option, you can set the TV's on-screen features to be shown in the other languages available.

To start :

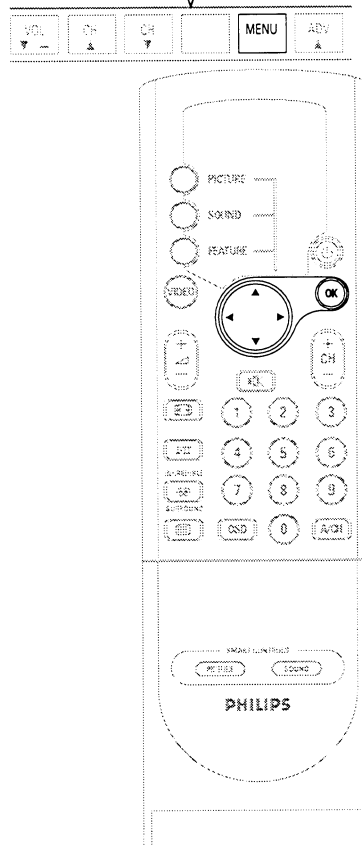
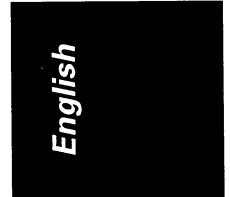
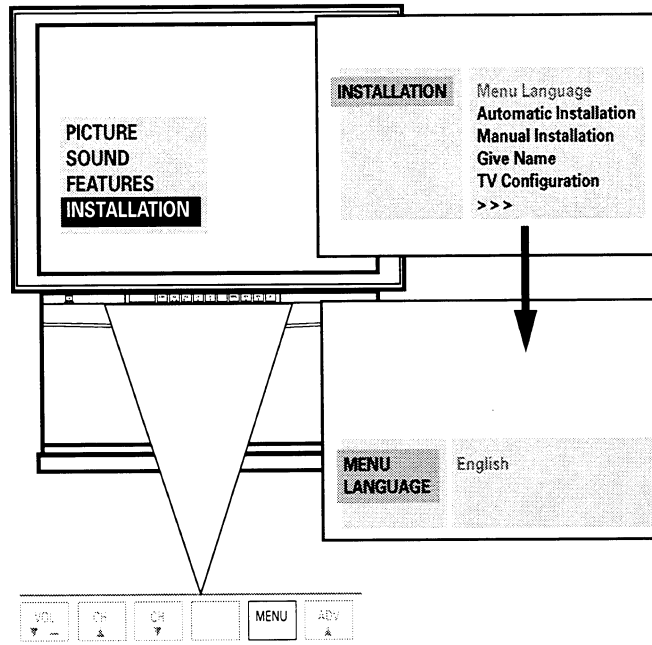
- ① Press **MENU** button on the TV control to call up the main menu.
- ② Press **▼** button to highlight "INSTALLATION" and use **◀** or **▶** button to select it.
- ③ Press **◀** or **▶** button to go into "MENU LANGUAGE" menu.
- ④ Press **◀** or **▶** button to select a language.
- ⑤ Press **OK** button to return to the "INSTALLATION" menu.

From now on, all the on-screen displays will appear in the language that you have chosen.

Note : If you need to re-select the language again, go back to the "INSTALLATION" menu and repeat steps 2 to 4. Otherwise proceed to the next step.

To exit :

- ⑥ Press **OK** button several times until the main menu disappears.





Automatic Installation

Use this item to search and store channels automatically.

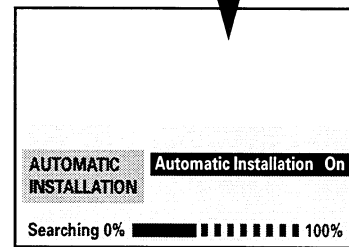
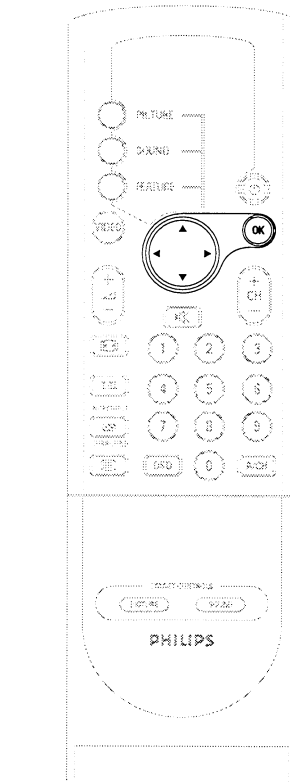
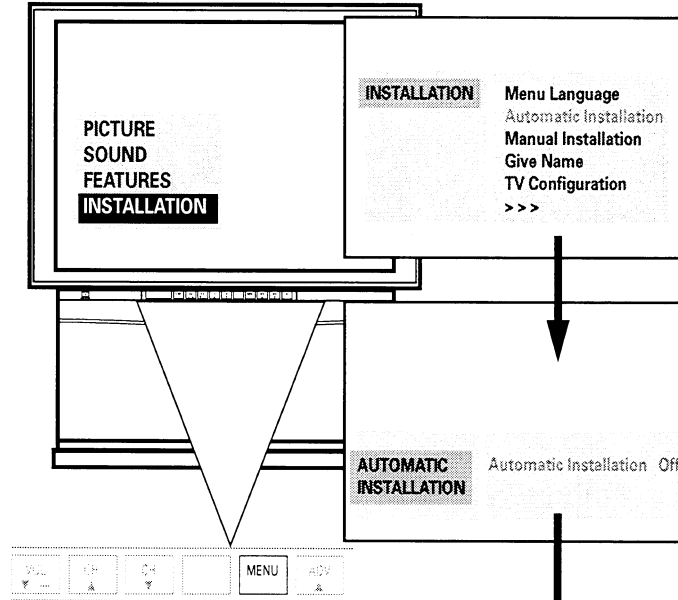
Note : Channel number 0 is not installed and is reserved for external connection via antenna input.

To start :

- ① Press **MENU** button on the TV control to call up the main menu.
- ② Press **▼** button to highlight "INSTALLATION" and use **◀** or **▶** button to select it.
- ③ Press **▼** button to highlight "Automatic Installation" and use **◀** or **▶** button to select it.
- ④ Press **▶** button to start searching and storing channels automatically.
An indicator appears at the bottom of the screen showing the progress of searching from 0% to 100%.

To exit :

- ⑤ Press **OK** button several times until the main menu disappears.



English



Manual Installation

Use this item to search channels individually and store them to your preferred numbers.

To start :

① Press **MENU** button on the TV control to call up the main menu.

② Press **▼** button to highlight "INSTALLATION" and use **◀** or **▶** button to select it.

③ Press **▼** button to highlight "Manual Installation" and use **◀** or **▶** button to select it. The "MANUAL INSTALLATION" menu appears.

④ Press **▼** button to highlight "Search."

⑤ **To start searching**

Method 1 :

Press **◀** or **▶**.

Once a channel is found, its sound system will be automatically selected. If reception is poor, press **◀** or **▶** button to start searching again or **CH +** or **CH -** button to fine tune in steps of 0.06 MHz (the change is reflected on the upper left hand corner of your screen).

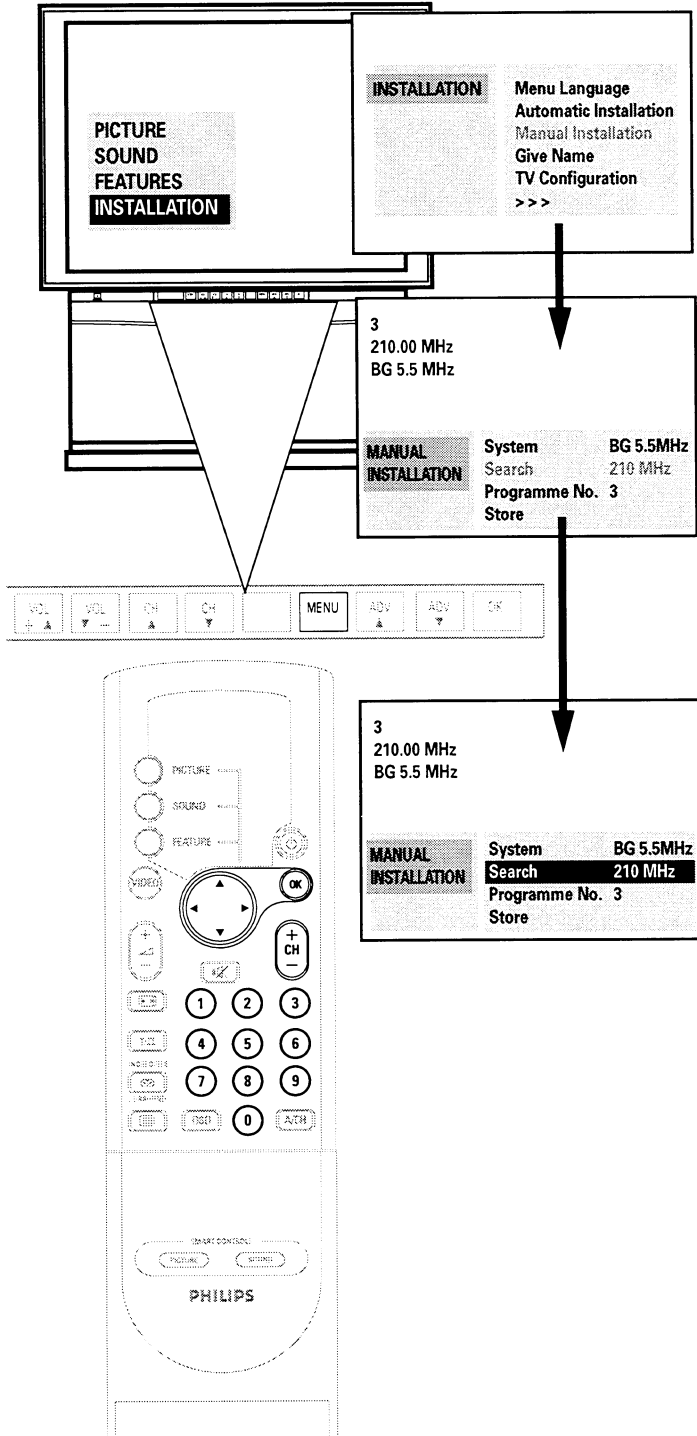
Note : If you need to interrupt during searching, press **▼** or **▲** button.

Method 2 :

Enter frequency (3 digits) directly with the digit button.

Use the frequency tables at the back of this manual to find the frequency you need. For a frequency below 100 MHz, enter "0" before the frequency, e.g. 050 MHz.

Note : If you have entered a wrong number, enter all digits first, then re-enter the correct number or press **▲** or **▼** to return to the previous frequency.



English



... manual installation

To select the sound system of the channel found

⑥ Press ▲ button to highlight "System."
This is the sound system of the channel. It is automatically selected according to the frequency of the channel. If the sound is weak (noisy), proceed to the next step, otherwise go to the next item on the menu.

⑦ Press ◀ or ▶ button to select a suitable system.

To assign a number for the channel located

⑧ Press ▼ button to highlight "Programme No."

⑨ Press ◀ or ▶ or digit button to select a number.

To store your selection in memory

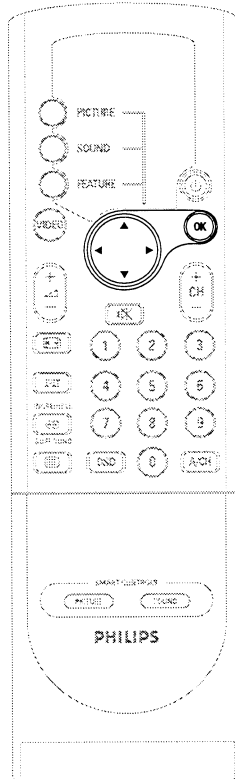
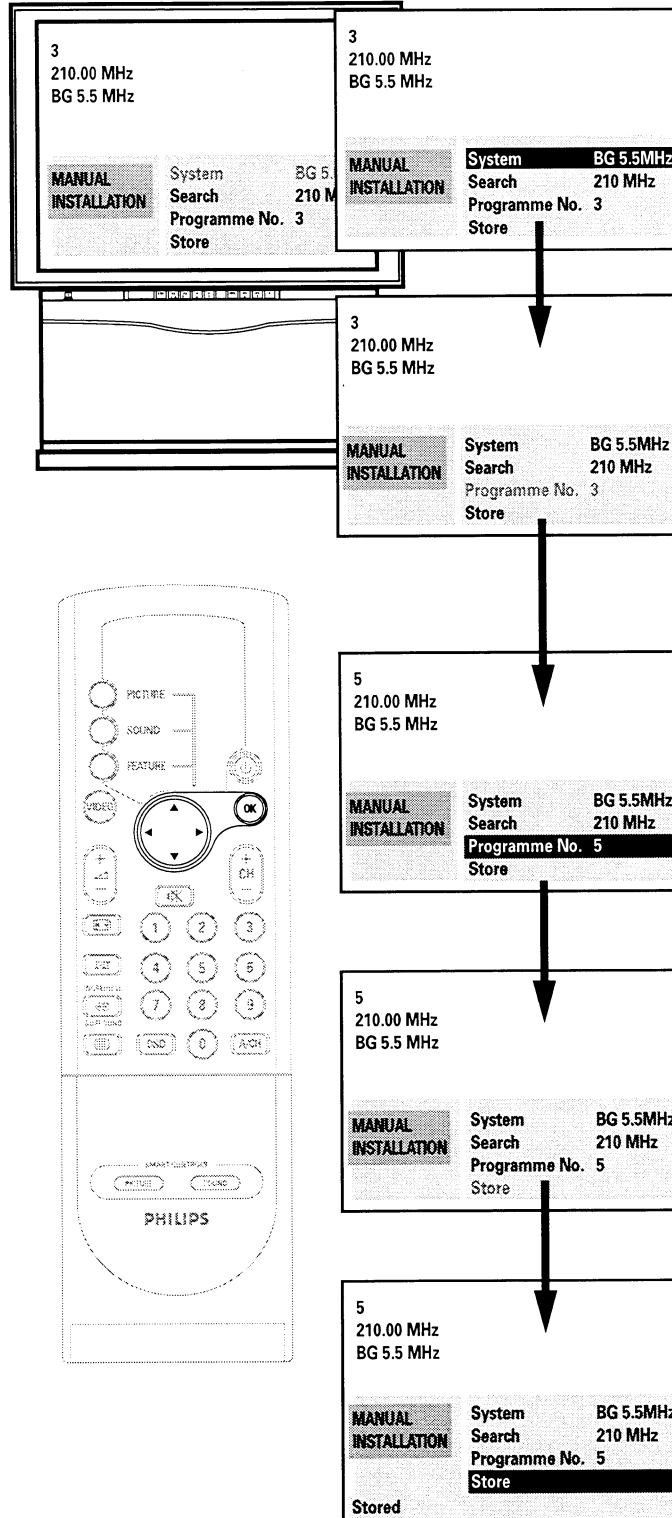
⑩ Press ▼ button to highlight "Store."

⑪ Press ◀ or ▶ button to store your selection.
The word "Stored" appears briefly to confirm that your selection is stored.

Continue searching for more channels if you wish.

To exit :

⑫ Press OK button several times until the main menu disappears.



English

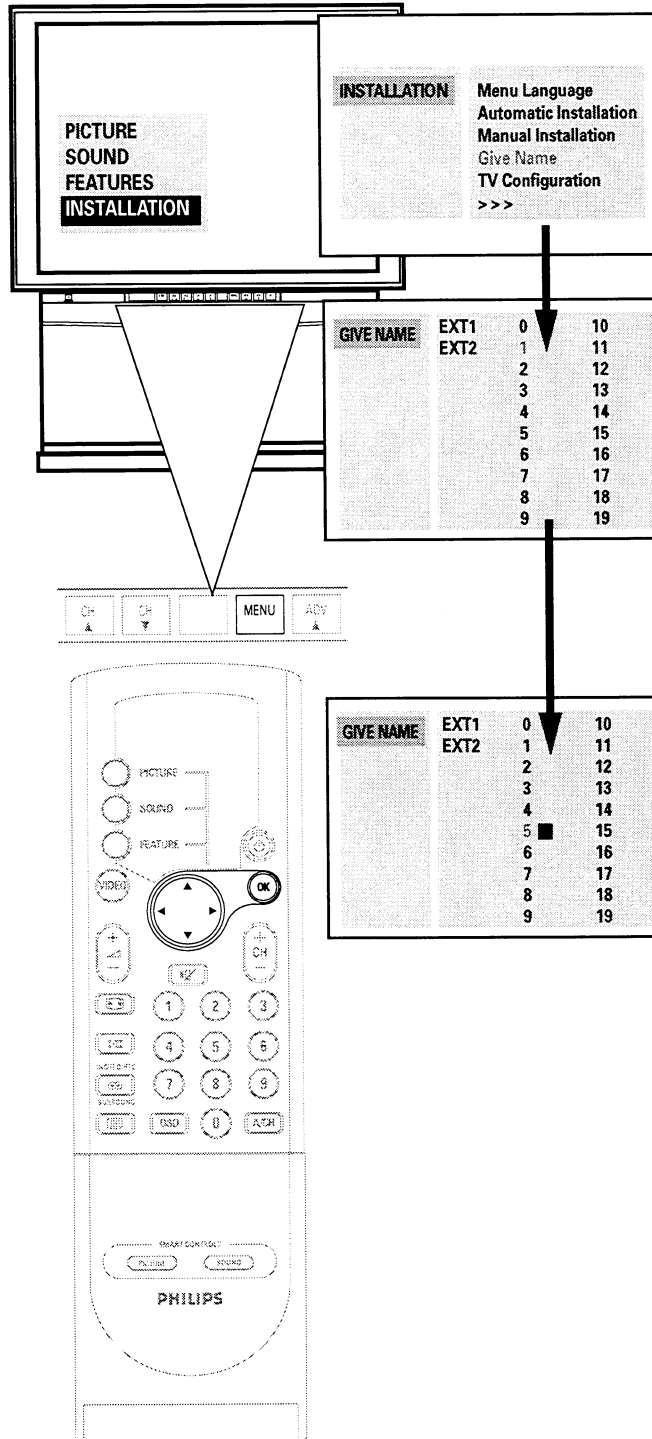


Give name

You can enter a new name or modify an existing name of a channel (including external channels EXT1 and EXT2) by the following steps.

To start :

- ① Press **MENU** button on the TV control to call up the main menu.
- ② Press **▼** button to highlight "INSTALLATION" and use **◀** or **▶** button to select it.
- ③ Press **▼** button to highlight "Give Name" and use **◀** or **▶** button to select it. The "GIVE NAME" menu appears.
The current channel number and name (if any) is highlighted.
- ④ Highlight the channel number which you wish to name or edit the name with the **◀** or **▶** button.
A block appears on the first position of the name for you to start keying in.



English

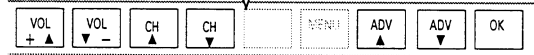
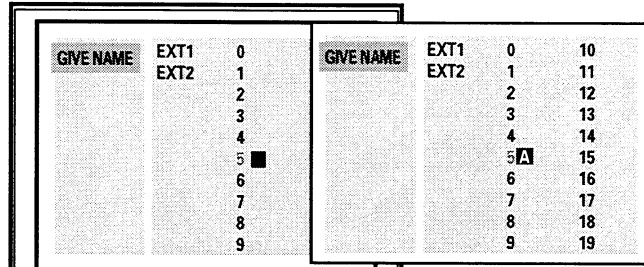


... give name

- ⑤ To start keying in refer to the table below for buttons to use.

Use	To
OK	end keying in process.
— or ►	select next character position.
+ or ◀	select previous character position.
ADV ▲ or ▲	select next character or number for the current position.
ADV ▼ or ▼	select previous character or number for the current position.

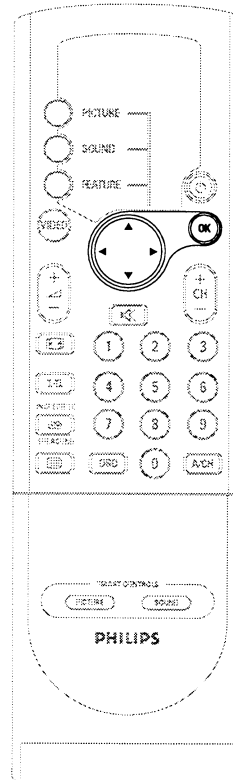
Note : The possible characters for a channel name are "A to Z, -, *, /, +, ., #, 0 to 9 and [Space]."



Repeat the same steps for other channel numbers.

To exit :

- ⑥ Press **OK** button several times until the main menu disappears.



English



TV Configuration

Select your TV Configuration with antenna-based or broadcast system external equipment connections. Note: TV Configuration may not be present on your model. This is available only with select region models.

To start :

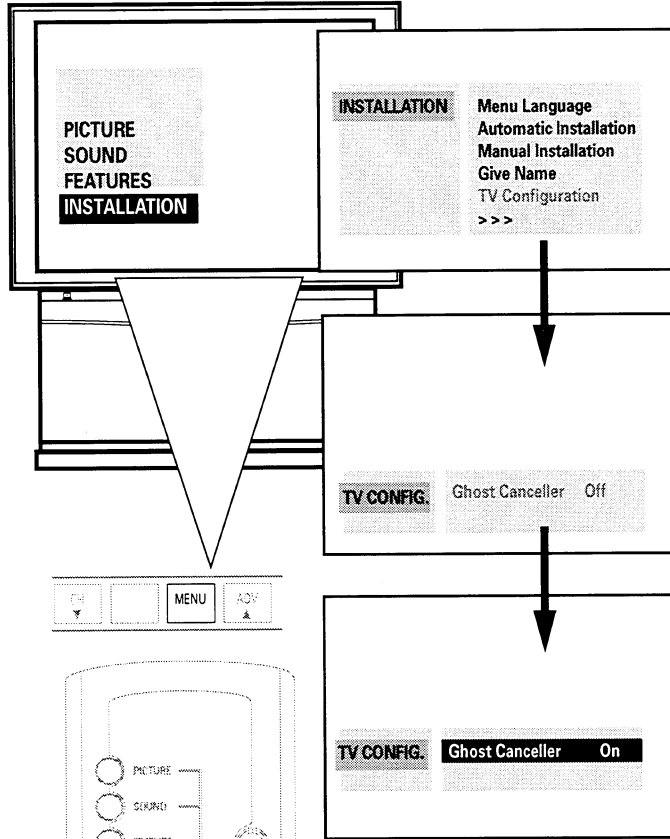
- ① Press **MENU** button on the TV control to call up the main menu.
- ② Press **▼** button to highlight "INSTALLATION" and use **◀** or **▶** button to select it.
- ③ Press **▼** button to highlight "TV Configuration" and use **◀** or **▶** button to select it.

A Ghost Canceller Set-Top Box will work within countries broadcasting a "Ghost Canceller" signal. You are recommended to use this feature when you receive "ghosts" or double images in your broadcasted picture. Follow the connection instructions provided with the Ghost Canceller Set-Top Box.

- ④ Press **◀** or **▶** to set "Ghost Canceller" to "On."
- Once your connection is done, leave it "On" to improve the reception of the picture you are watching.

To exit :

- ⑤ Press **OK** button several times until the main menu disappears.



English



Reshuffle

To arrange the channel list in the order of your preference.

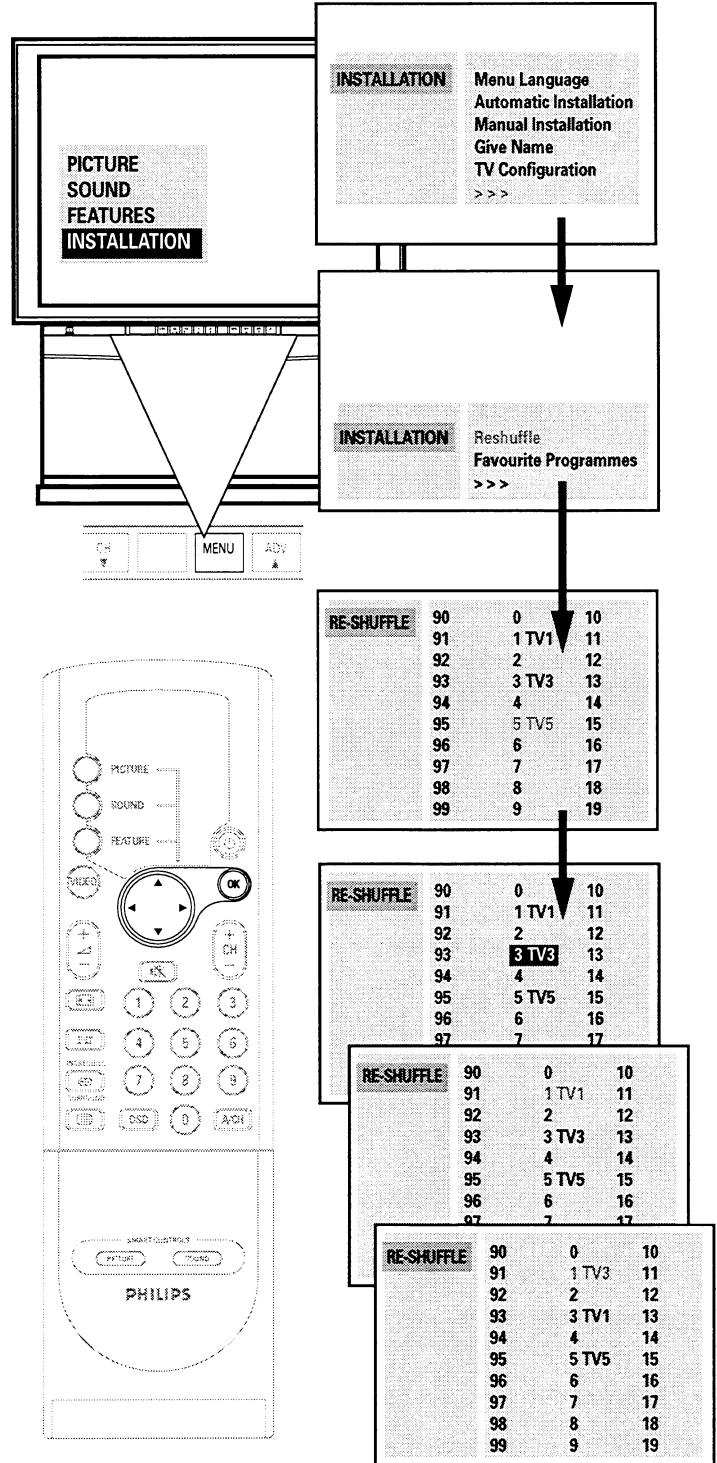
To start :

- ① Press **MENU** button on the TV control to call up the main menu.
- ② Press **▼** button to highlight "INSTALLATION" and use **◀** or **▶** button to select it.
- ③ Press **▼** button to highlight ">>>" and use **◀** or **▶** button to select it.
- ④ Press **◀** or **▶** button to select "Reshuffle." A channel list appears and the current channel number and name is highlighted (e.g. 5).
- ⑤ Press **▲** or **▼** button to select a channel (e.g. 3) which you wish to relocate to another number. Confirm with **◀** or **▶** button. The selected channel number is highlighted.
- ⑥ Press **▲** or **▼** button to move to a new channel number (e.g. 1).
- ⑦ Press **◀** or **▶** button. The TV channel stored in channel number 3 and that in channel number 1 exchanges place.

Repeat the same steps for other channel numbers which you want to rearrange.

To exit :

- ⑧ Press **OK** button several times until the main menu disappears.



English



Favourite Programmes

All the TV channels which you have stored earlier during installation has been automatically placed into a "favourite" list. Only those channel numbers which are in this list can be called up by pressing the **CH +** or **-** button. All other channel numbers could only be called up by the digit buttons. You may want to include more or exclude certain channel numbers from this list.

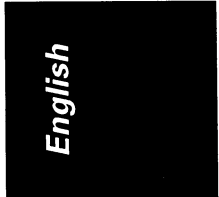
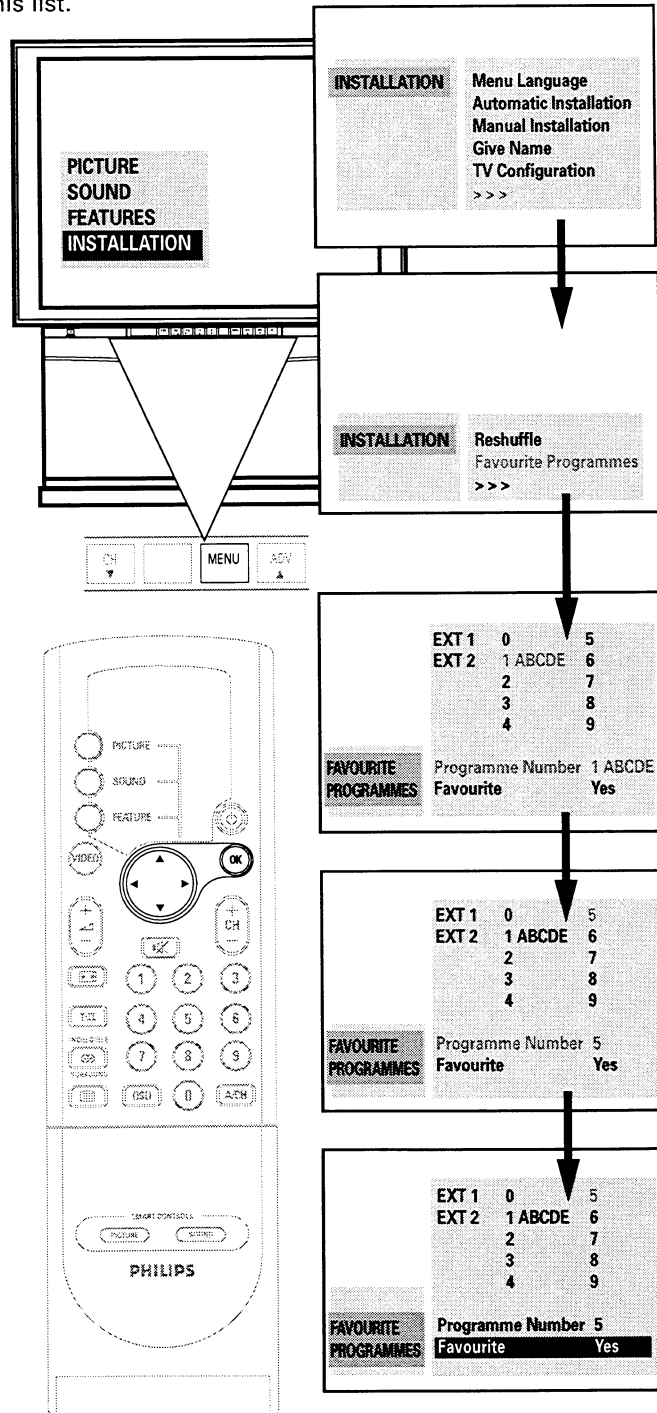
To start :

- 1 Press **MENU** button on the TV control to call up the main menu.
- 2 Press **▼** button to highlight "INSTALLATION" and use **◀** or **▶** button to select it.
- 3 Press **▼** button to highlight ">>>" and use **◀** or **▶** button to select it.
- 4 Press **▼** button to highlight "Favourite Programmes" and use **◀** or **▶** button to select it.
A channel list appears and the current channel number and name is highlighted.
- 5 Select a channel number which you want to add or delete from the "Favourite Programmes" list.
- 6 Press **▼** button to highlight "Favourite".
- 7 Press **◀** or **▶** button to select "Yes" (add to list) or "No" (delete from list).

Repeat the same steps for more channel numbers .

To exit :

- 8 Press **OK** button several times until the main menu disappears.





Picture adjustment

For adjustment of contrast, brightness, colour, tint (only active for NTSC programmes), sharpness and white tone.

To start :

Method 1 :

- ① a) Press **MENU** button on the TV control to call up the main menu.
- b) Press **◀** or **▶** button to select "PICTURE" menu.

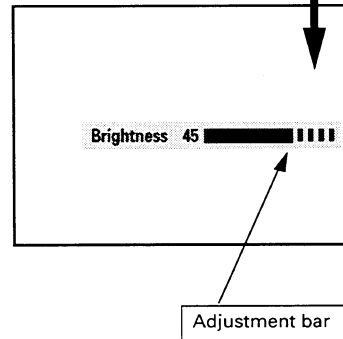
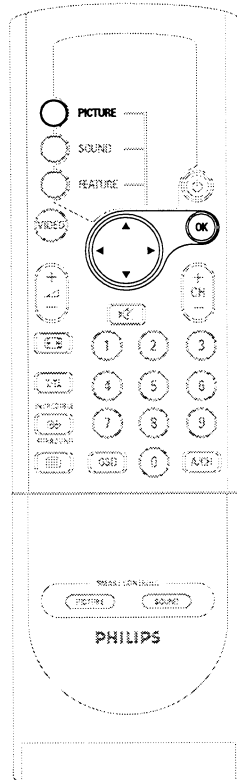
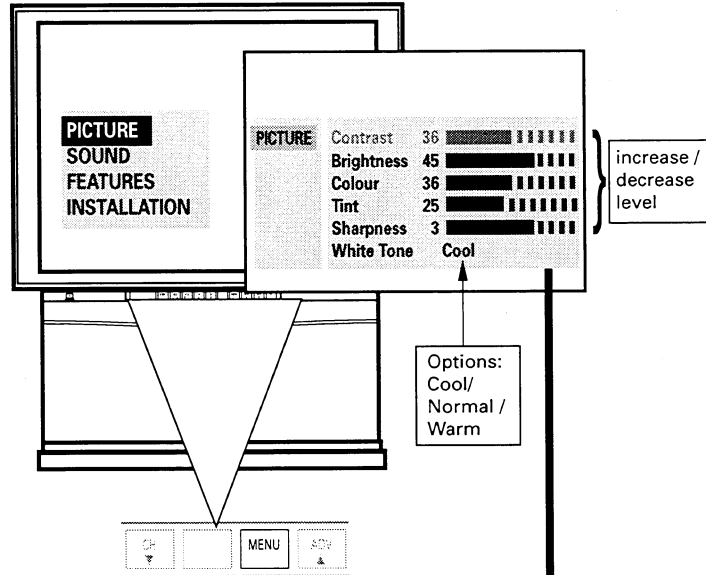
OR

Method 2 :

- ① Press **PICTURE** button on the remote control to call up the "PICTURE" menu.
- ② Press **▼** button to highlight an item e.g. "Brightness."
- ③ Press **◀** or **▶** to adjust level.
An adjustment bar indicates the level of adjustment.
Note : If no adjustment is made within 2 seconds, the "PICTURE" menu comes back onto the screen.
- ④ Press **OK** button to return to the "PICTURE" menu and select another item.

To exit :

- ⑤ Press **OK** or **PICTURE** button twice.



English



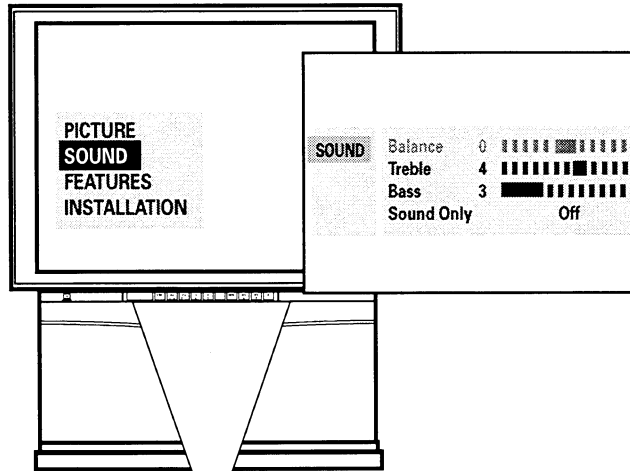
Sound adjustment

For adjustment of balance, treble, bass and sound only.

To start :

Method 1 :

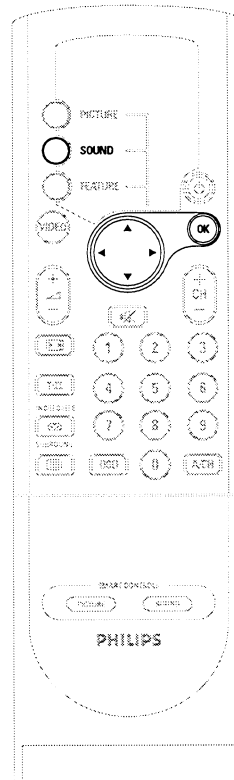
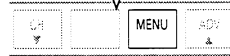
- ① a) Press **MENU** button on the TV control to call up the main menu.
- b) Press **▼** button to highlight "SOUND" and use **◀** or **▶** button to select it.



OR

Method 2 :

- ① Press **SOUND** button on the remote control to call up the "SOUND" menu.
- ② Press **▼** button to highlight an item, e.g. "Treble."
- ③ Press **◀** or **▶** to adjust level.



Item	Selection
Balance	increase/decrease level.
Treble	increase/decrease level.
Bass	increase/decrease level.
Sound Only*	On/Off

* If you select "On," the screen will blank out and you can only hear sound. To recover the screen, press any button (except the volume control buttons) on your remote control or TV controls. Wait for 6 to 10 seconds.

To exit :

- ④ Press **OK** or **SOUND** button twice.

English



Features

The features menu consists of the following :

- Pip
- Sleeptimer
- Child Lock
- Message
- Timers
- Convergence

To start :
Method 1 :

- ① a) Press **MENU** button on the TV control to call up the main menu.
- b) Press **▼** button to highlight "FEATURES" and use **◀** or **▶** button to select it.

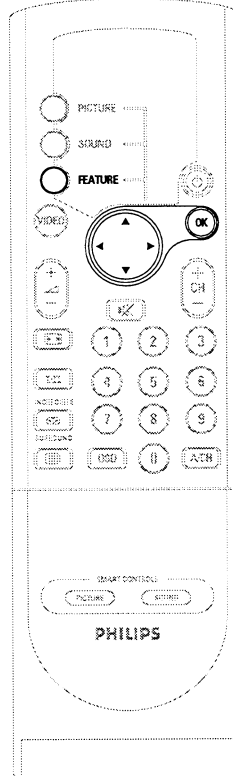
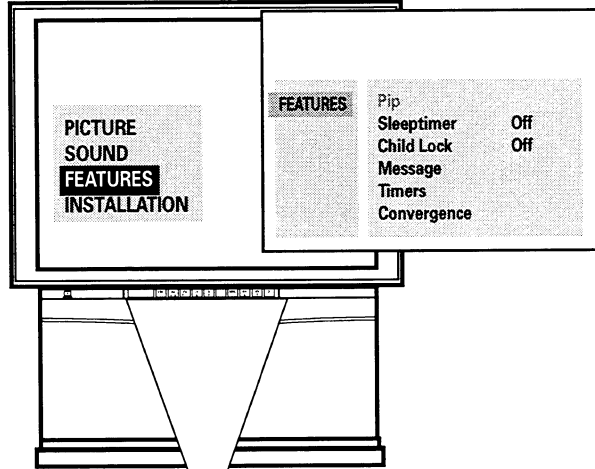
OR

Method 2 :

- ① Press **FEATURES** button on the remote control to call up the "FEATURES" menu.
- ② Press **▼** button to highlight an item e.g. "Sleeptimer."
- ③ Press **◀** or **▶** to select options.

To exit :

- ④ Press **OK** or **FEATURE** button twice.



English



... features

Pip

Fix the size and adjust the contrast level of the PIP screen.

Select PIP size

- ① Press ◀ or ▶ to select the "PIP" menu.
- ② Press ◀ or ▶ to select either "Small" or "Large." A PIP screen appears at one corner of the screen showing the size that you selected.

Adjust PIP contrast

- ① Press ▼ to select "PIP Contrast."
- ② Press ◀ or ▶ to adjust contrast level.

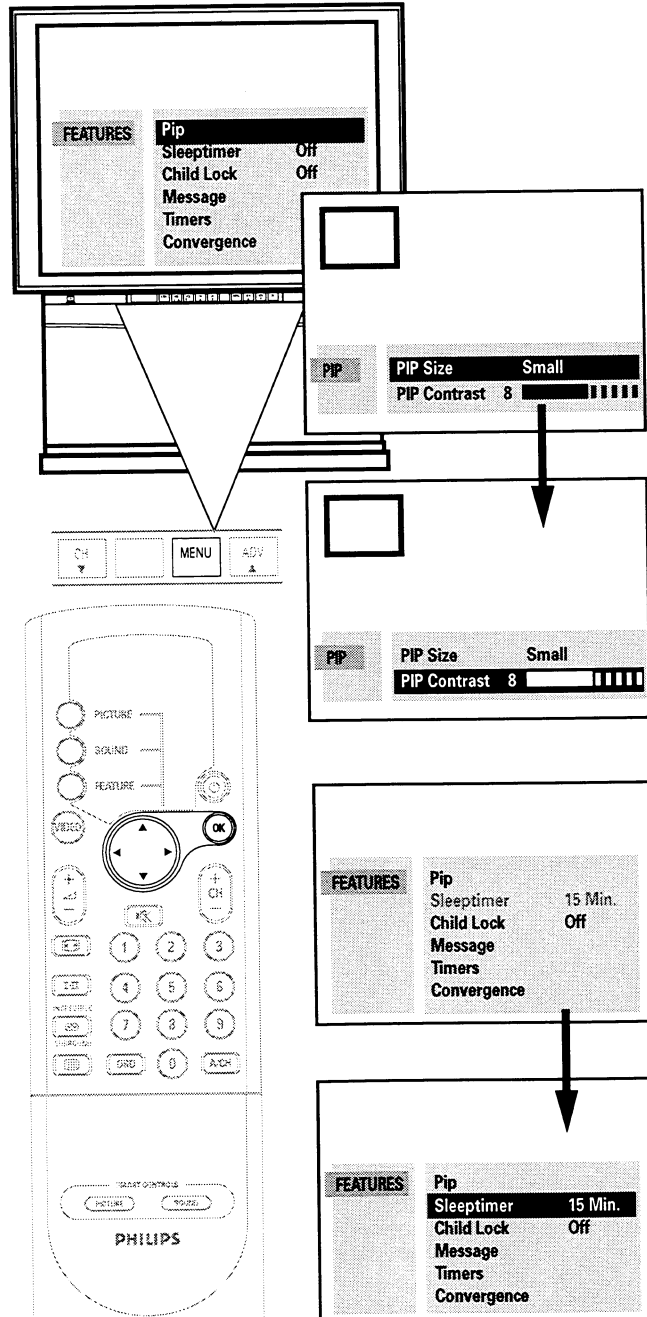
To return to the "FEATURES" menu

- ③ Press OK button.

Sleeptimer

Use to set a time for the TV to switch to "standby" (switch off temporarily). If you do not wish to set the timer, select "Off." One minute before the TV switches to "standby," the time appears on the screen with the message "Good Night" and counts down.

- ① Press ▼ to select "Sleeptimer" in the "FEATURES" menu.
- ② Press and hold down the ▶ button to increase the timer in steps of 15 minutes to a maximum of 180 minutes, or press and hold down the ◀ button to decrease the timer.



English



... features

English

Child Lock

Use to prevent children or unauthorised personnel from selecting TV channels. This feature locks the CH ▲, CH ▼ and MENU button on the TV control. Control of the TV via the remote control is still possible. Therefore, keep the remote control in a separate, secure place in order to effectively use this feature.

① Press ▼ button to highlight an item "Child Lock."

② Press ◀ or ▶ to select either "Off" or "On."

When "Child Lock" is switched "On,"

- a) a message "Child Lock On!" appears whenever you press the CH ▲, CH ▼ or MENU button on the TV control.
- b) TV will go to "standby" whenever you switch on the TV via the power knob or mains supply.

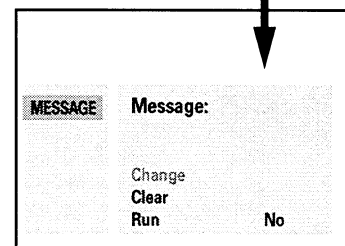
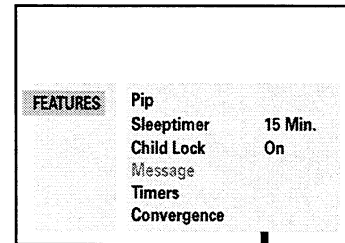
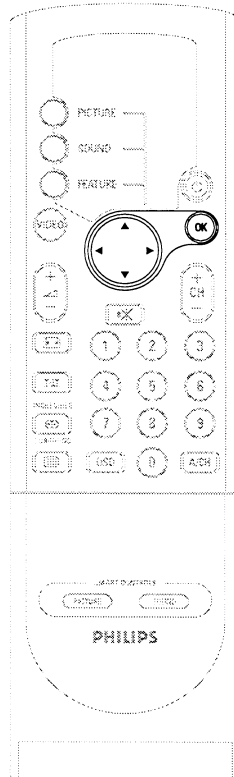
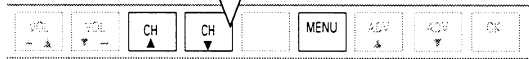
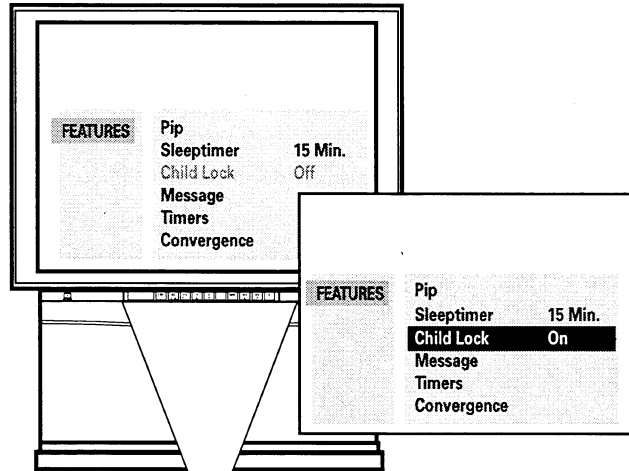
Note: To switch on the TV from "standby," refer to page 12 on "General TV controls."

Message

Create messages for display on the TV screen.

① Press ▼ button to highlight an item "Message."

② Press ◀ or ▶ to select it. A "MESSAGE" menu appears.





... features

Change message

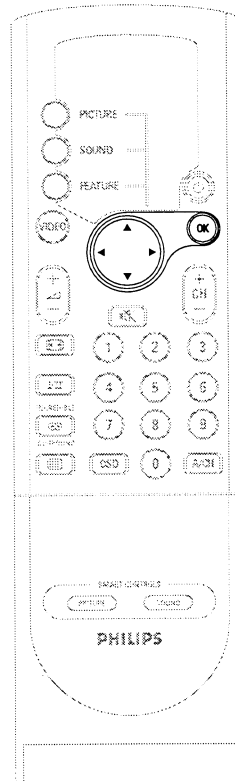
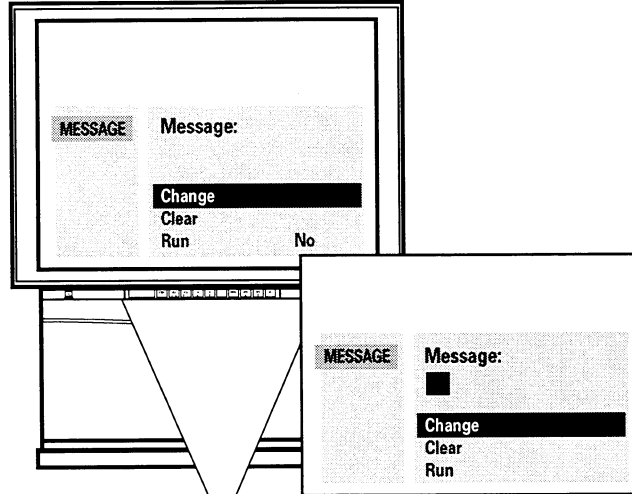
Create a new message or edit an existing message.

- ① Press ◀ or ▶ to select "Change."

A block appears below "Message:."

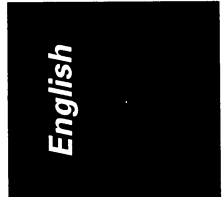
- ② Press ◀ or ▶ or ▼ or ▲ button to key in the characters.

A maximum of 2 lines with 27 characters per line is possible. Refer to Table 1 below for details.



Use this	To
OK	end keying in process.
▶	select next character position.
◀	select previous character position.
▲	select next character or number for the current position.
▼	select previous character or number for the current position.
The possible characters are "A...Z, -, *, /, +, •, 0...9 and [Space]."	

Table 1



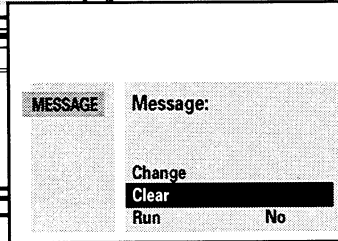
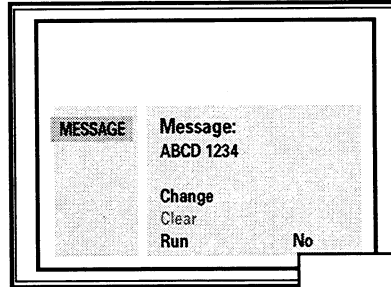


... features

Clear message

Delete a message completely.

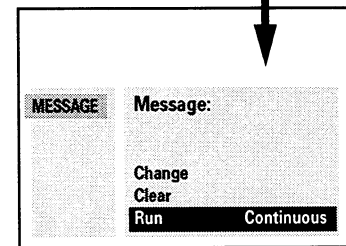
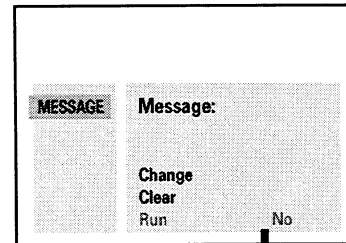
- ① Press ▼ to highlight "Clear."
- ② Press ◀ or ▶ button to select it.
The whole message is deleted.



Run message

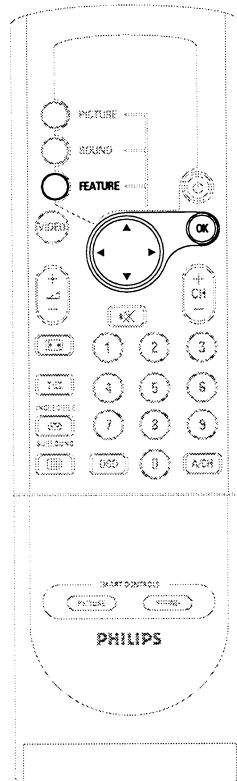
Select the mode of display of a message.

- ① Press ▼ to highlight "Run."
- ② Press ◀ or ▶ button to select "No" or "Continuous."
*No : Do not run message.
Continuous : Run message continuously.
Note : The "Run" message will reset to "No" once you switch off the TV by the mains supply, mains power knob, or OK button.*



To return to "FEATURES" menu :

- ③ Press OK or FEATURE button once.



English



... features

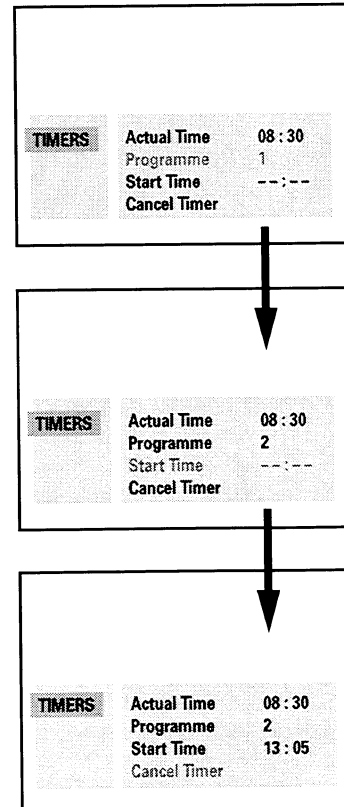
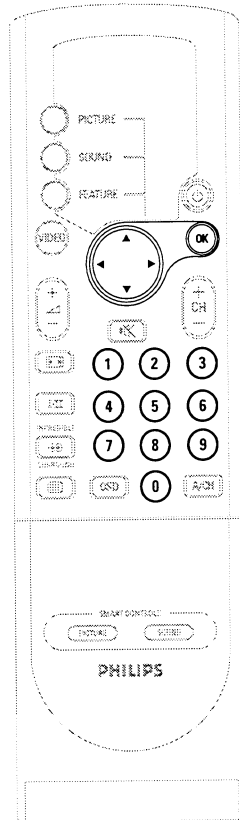
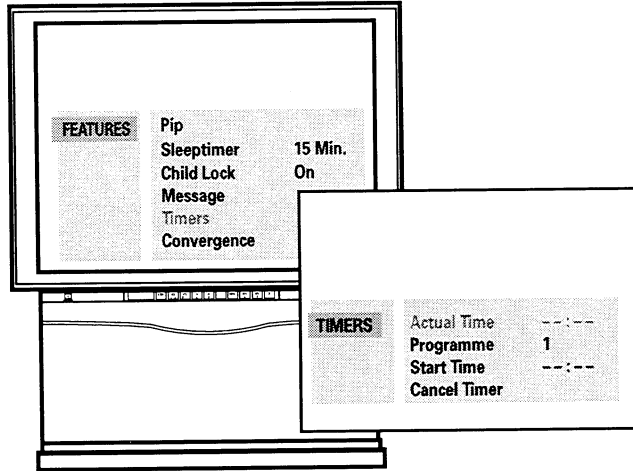
Timers

Program the TV to switch to another channel at a specific time.

- ① Press ▼ to highlight "Timers."
- ② Press ◀ or ▶ button to select it.
A "TIMERS" menu appears.
- ③ Press ◀ or ▶ button to start keying the "Actual Time."
*This is the current time.
Enter the time with the digit buttons, starting with hours, then minutes.*
- ④ Press ▼ to highlight "Programme."
*This is the channel that you want to switch to at the pre-set time.
Enter the channel number for the desired channel.*
- ⑤ Press ▼ to highlight "Start Time."
*This is the preset time that you want the channel switching to occur.
Enter the time with the digit buttons, starting with hours, then minutes.*
- ⑥ Press ▼ to highlight "Cancel Timer."
*This cancels the "Start Time."
To execute, press the ◀ or ▶ button.*

To return to "FEATURES" menu :

- ⑦ Press OK or FEATURE button once.



English



... features

Convergence

This projection TV uses 3 separate tubes : red, green and blue. The red, green and blue images are projected onto the screen, where they converge to form a full colour picture. You can see a clear picture only when they converge correctly. Convergence has been set at the factory but may drift over time. If you do not see a clear picture, follow the steps below to do an adjustment.

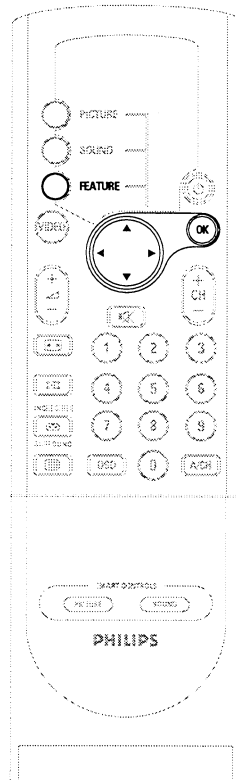
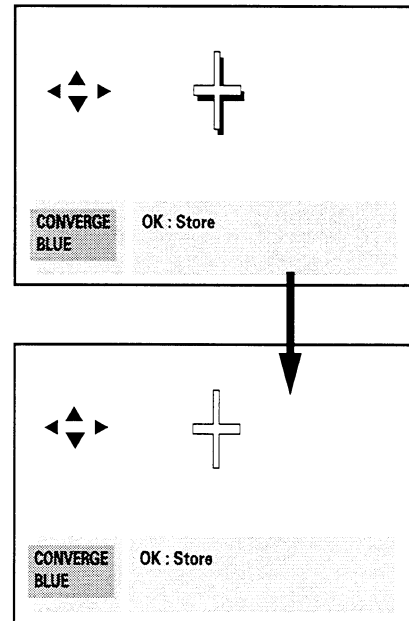
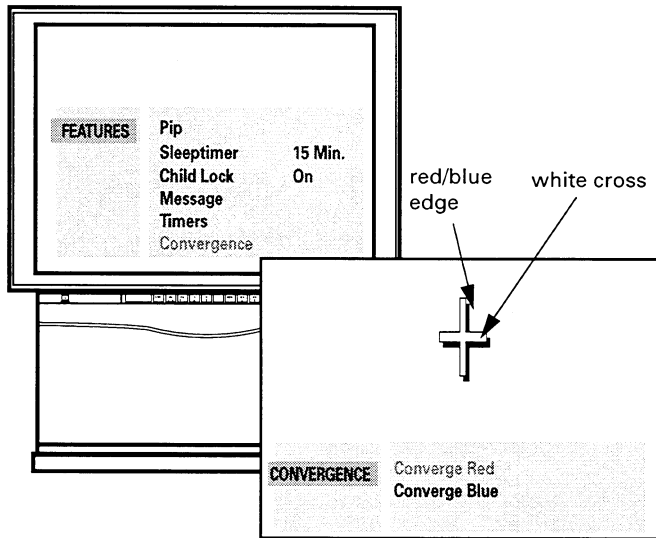
- ① Press ▼ to highlight "Convergence."
- ② Press ◀ or ▶ button to call up the "CONVERGENCE" menu.

If red colour appears around the edges of the object, select "Converge Red." If blue colour appears, select "Converge Blue" to adjust.

- ③ Press ▼ to highlight an item, e.g. "Converge Blue" and ◀ or ▶ button to call up the "CONVERGE BLUE" menu.
- ④ Press ◀ or ▶ or ▲ or ▼ button to move the blue (red) cross directly over the white cross on the TV screen.
The blue (red) cross is properly adjusted when completely merged with the white cross. (No colour appears around the edge of the white cross.)

To exit without saving :
Press **FEATURE** or any menu button.

To exit and save :
Press **OK** button.



English

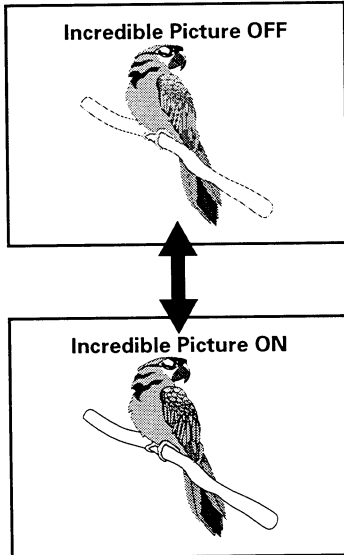


Picture enhancement features

Incredible picture

This feature automatically optimises the picture you are watching.

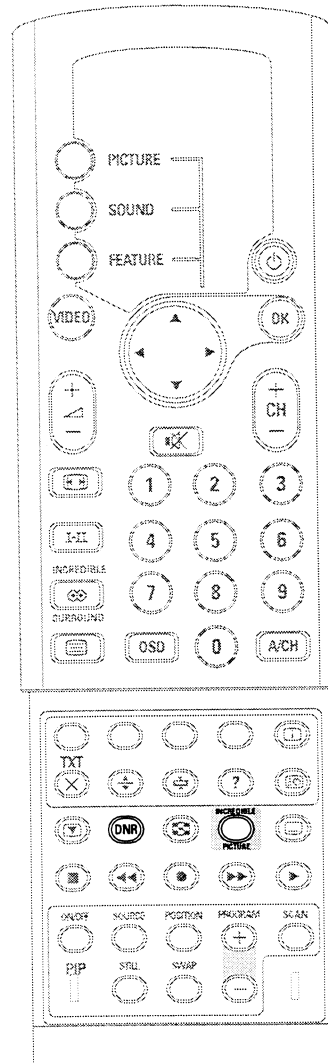
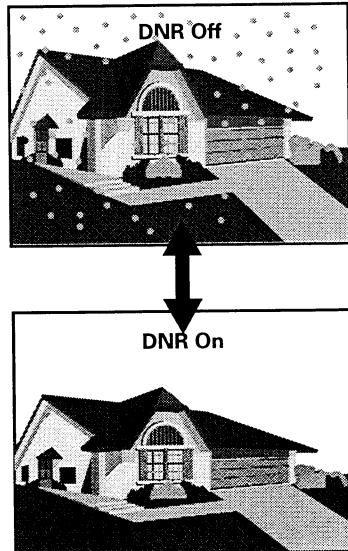
- Press the **INCREDIBLE PICTURE** button to switch on or off this feature.



DNR

If you encounter some picture interference (e.g. snowy picture) while watching a programme, switch to "DNR On" to improve the picture.

- Press the **DNR** button to switch to "On" or "Off."



English

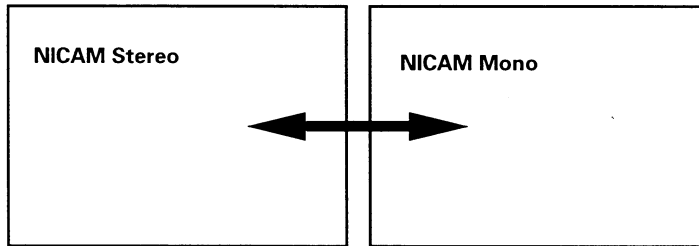


Stereo sound

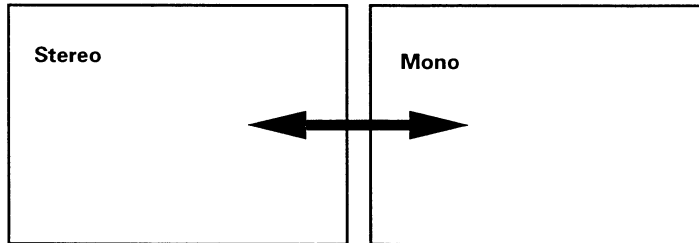
Depending on the sound system in transmission, a TV programme may be transmitted in NICAM or 2CS Stereo. You can switch to "Mono" and back again. When there are two languages in simultaneous transmission, you can select either one of the languages.

Switch to mono

- Press the **I-II** button to switch between stereo and mono.



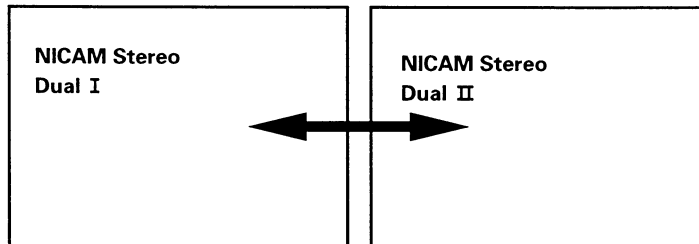
For NICAM stereo transmission



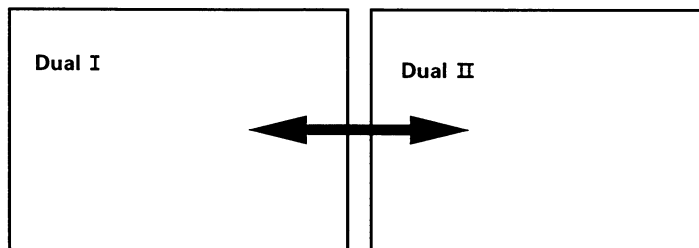
For 2CS stereo transmission

Switch first and second language

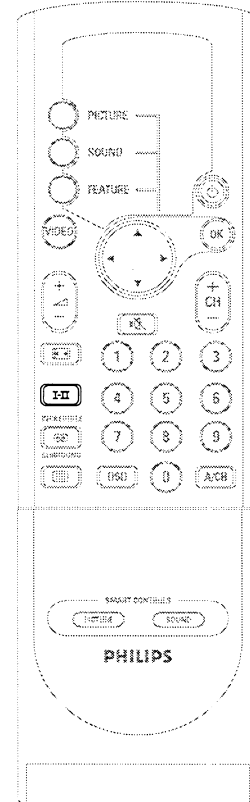
- Press the **I-II** button to select the first and second language.



For NICAM stereo transmission



For 2CS stereo transmission



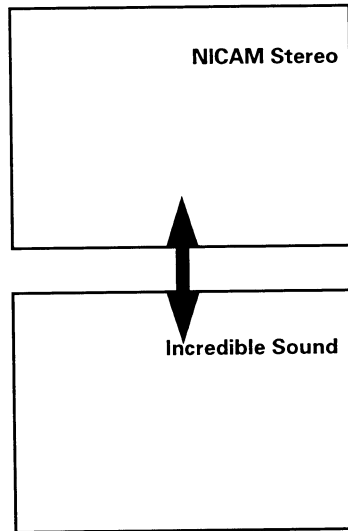


Stereo enhancement features

The "Incredible Sound" and the "Spatial Sound" features are designed to boost the sound effect of the TV. The "Incredible Sound" feature is meant to enhance stereo sound, while the "Spatial Sound" feature gives a "surround" effect to mono sound.

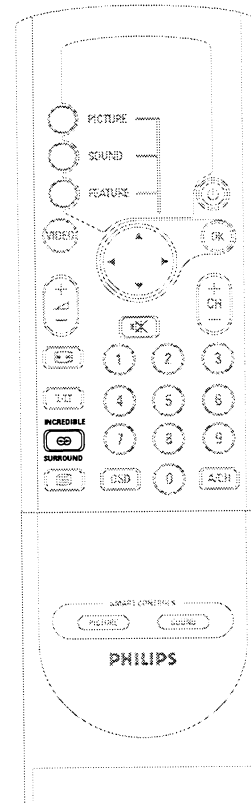
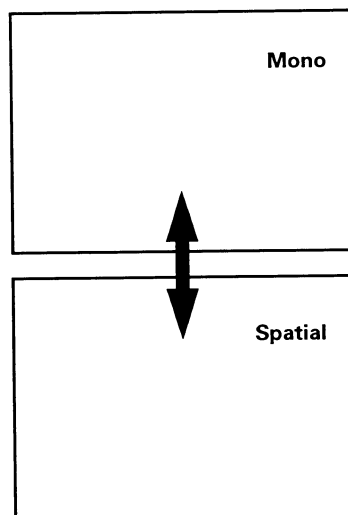
Incredible sound (for stereo sound only)

- Press the **INCREDIBLE SURROUND** button to switch on or off the effect.



Spatial sound (for mono sound only)

- Press the **INCREDIBLE SURROUND** button to switch on or off the effect.



English

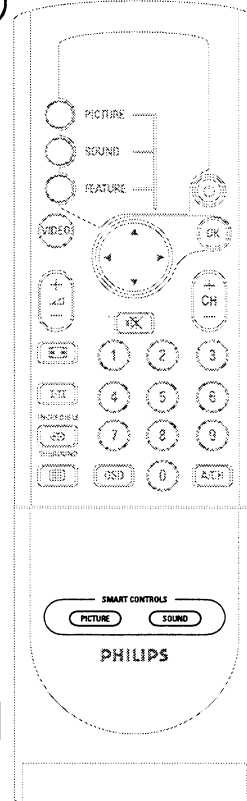
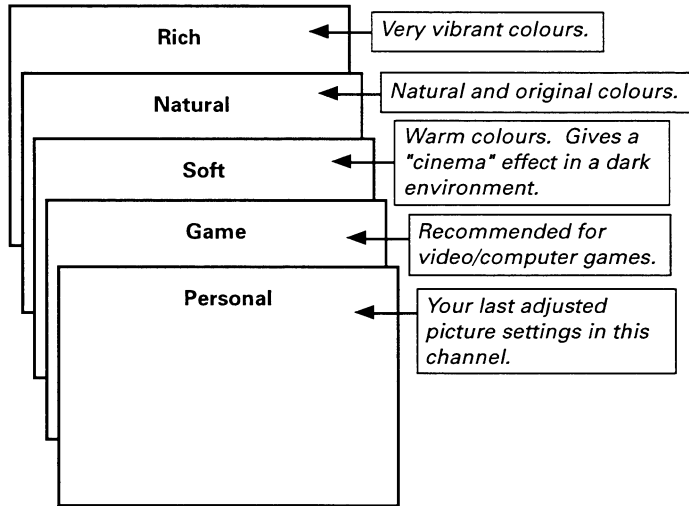


Smart controls

Your TV has been programmed with certain preset modes to optimise the picture and sound quality of the programme you are watching. The "Personal" mode is the only mode which you could set yourself.

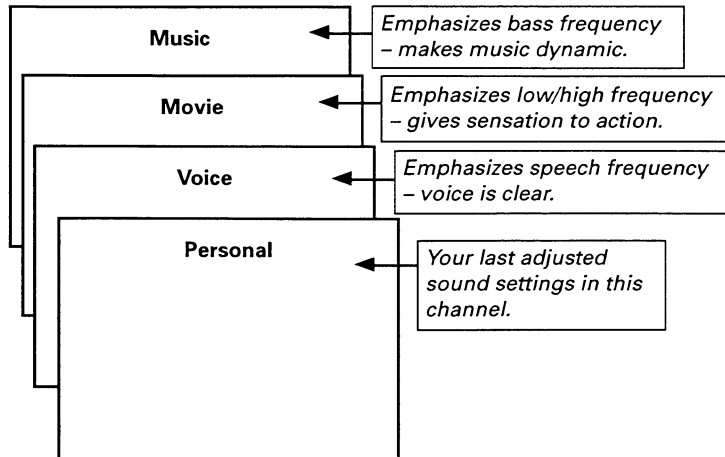
Select picture settings

Press the **SMART CONTROLS PICTURE** button repeatedly to select "Rich," "Natural," "Soft," "Game," or "Personal."



Select sound settings

Press the **SMART CONTROLS SOUND** button repeatedly to select "Music," "Movie," "Voice," or "Personal."



English



VCR controls

The remote control for this TV is designed specially to be used with selected PHILIPS video cassette recorders (VCR). To ensure compatibility, please refer to the individual equipment's instruction manual when using this remote control.

Open the lower half of the remote control to access the VCR control buttons.

Stop movement of tape

Press ■ button.

Rewind tape

Press ◀ button.

Record onto tape

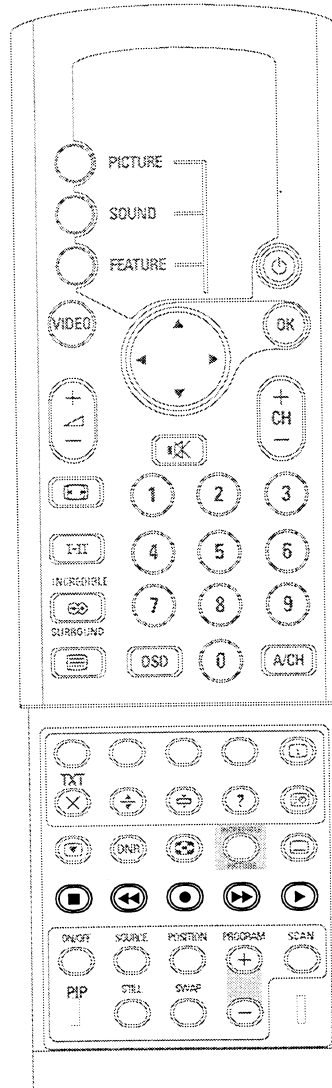
Press ● button.

Fast forward tape

Press ▶▶ button.

Playback tape

Press ▶ button.



English



Picture In Picture (PIP)

Your television is equipped with the PIP feature. With PIP, you can call up a sub-screen within the main television screen. Therefore, you can watch 2 channels at the same time.

Open the lower half of the remote control to access the PIP function buttons.

Switch on/off PIP

- ① Press **ON/OFF** button once to call up the PIP screen.
- ② Press **ON/OFF** button again to switch off the PIP screen.

Select PIP source

Press **SOURCE** button repeatedly to cycle through the various sources. Stop as soon as you find the source that you want.

If you have not made a prior connection to a VCR, Laser disc player, etc., then the PIP screen will appear blank.

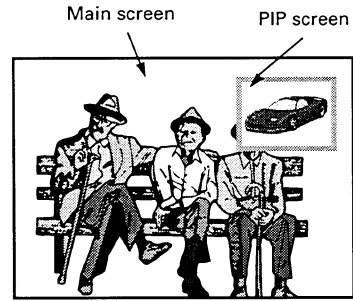
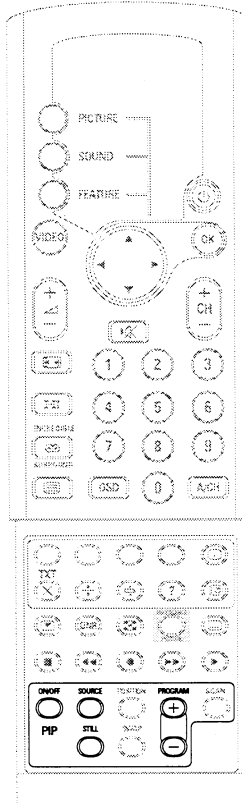
Freeze PIP screen

- ① Press **STILL** button once to freeze the PIP screen.
- ② Press **STILL** button again to unfreeze the PIP screen.

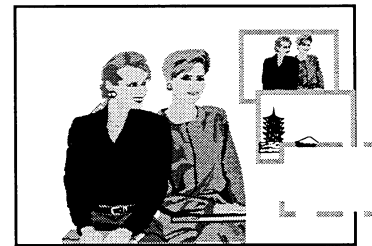
Scan PIP channels

Press **PROGRAM +** or **-** button for more than 3 seconds. The TV will automatically scan through all the channels in the "Favourite Programmes" list and EXT 1 and EXT 2.

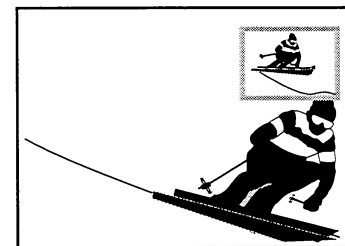
The scan goes in a loop. To stop scanning, press any PIP function button.



PIP On



PIP Source



PIP Freeze



... picture in picture

Select PIP position

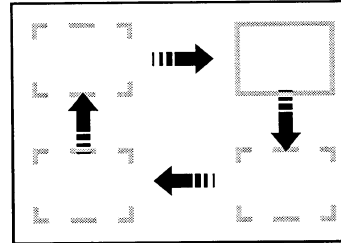
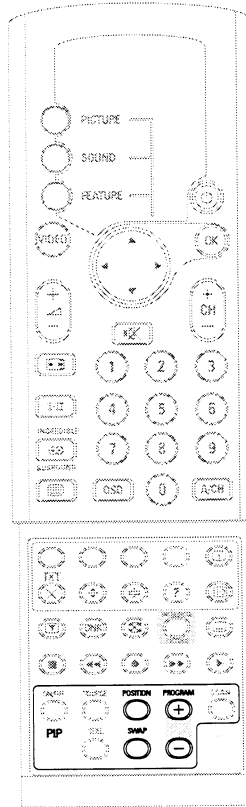
Press **POSITION** button to move PIP screen to any of the 4 corners of your main screen.

Select PIP channels

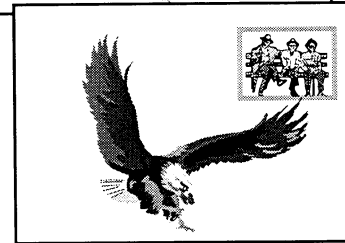
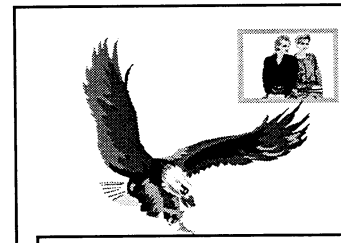
Press **PROGRAM +/-** button repeatedly to select a higher or lower channel number.

Swap PIP screen with main screen

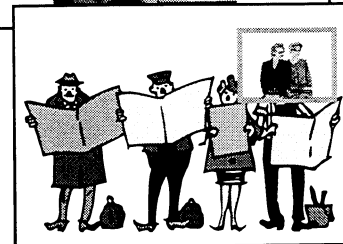
Press **SWAP** button to interchange the PIP screen with the main screen.



PIP Position



PIP Channels



PIP Swap



English




Teletext

Most television channels broadcast information via teletext. Look for the main index page (usually page 100) for information on how to use its teletext system. To start, select a channel that is broadcasting teletext.

To switch on/off Teletext

- ① Press the  button once to switch on Teletext.
A teletext page appears with two information lines at the top and an option line at the bottom.
- ② Press the  button repeatedly until you see the last viewed TV programme again.

Select index page

Press  button to select.

Select a teletext page

a) with the digit buttons

Enter a page number (3 digits) with the digit buttons.
The selected page number will display at the top left corner. If page is not available, the message "Page Not Available" appears on the first information line. If you make a mistake entering the page number, you have to complete the 3 digits before rekeying the correct page number.

b) with the option line

Press the corresponding colour buttons of the colour options shown at the bottom of the screen to select the respective Teletext page.

First information line

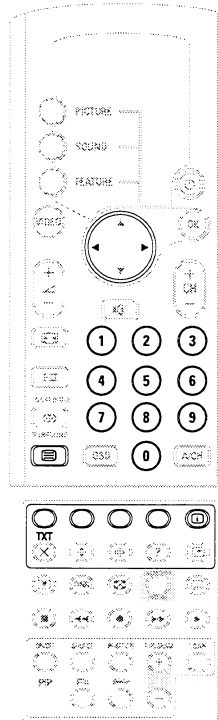
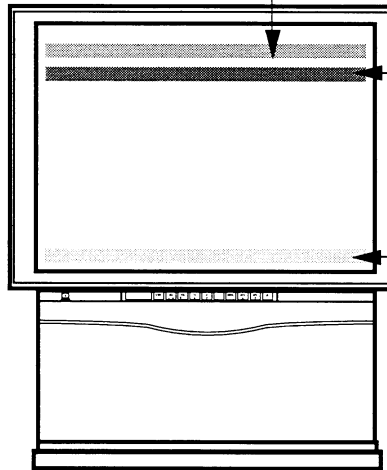
If a selected teletext page contains subpages, the page number will appear here. The coloured number indicates the displayed subpage. The white number refers to the subpages, which are selectable with the ◀ or ▶ button.

Second information line

Contains the name of the TV channel, the page counter, date, and time.

Option line

Contains colours indicating the corresponding colour button to use for fast access to information.





... teletext

Fast select teletext pages

a) Scroll through pages

- ① Press CH - or ▼ button to select the previous page.
- ② Press CH + or ▲ button to select the following page.

b) Select current and previous page

- ① Press A/CH once to go to previous page.
- ② Press A/CH again to come back to current page.

Select a subpage

When you view a selected teletext page containing subpages, one of them will appear on the screen. Once the rest of the subpages are found, they will appear in white on the first information line. The current subpage will be in colour.

- ① Press ◀ button to select the previous subpage.
- ② Press ▶ button to select the following subpage.

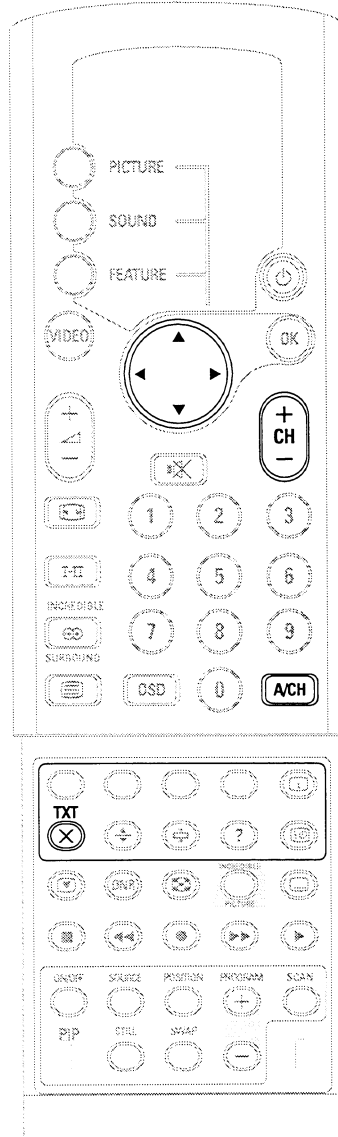
Interchange Teletext or TV mode

- ① Press X button.
The television programme appears with a "☒" symbol at the top left corner of the screen. If you select a page number at this moment, it will appear in place of the "☒" symbol.
- ② Press X button again to view your Teletext page.

News Flash

If you select the news flash page and you are viewing the television programme after pressing X button, the moment news is updated, the word "NEWS FLASH" and the news will appear on the screen.

- ① Press X button to conceal the news.
The television programme appears with the "☒" symbol at the top corner of the screen. If you select a page number at this moment, it will appear in place of the "☒" symbol.
- ② Press X button to recall the news.



English



... teletext

Enlarge Teletext page

- ① Press button to enlarge the top half of the teletext page.
- ② Press button to scroll the text line by line.
- ③ Press button again to enlarge the bottom half of the teletext page.
- ④ Press button to scroll the text line by line.
- ⑤ Press button once more to return to normal.

Hold a teletext page

A subpage will rotate to the next after about 20 seconds. You can use this feature to hold down a subpage. The total number of subpages are indicated on the top right hand corner of your screen (e.g. 1/2) and on the first information line (e.g. 01, 02).

- ① Press button to hold a subpage.
- ② Press button again to resume page rotation.

Reveal concealed information

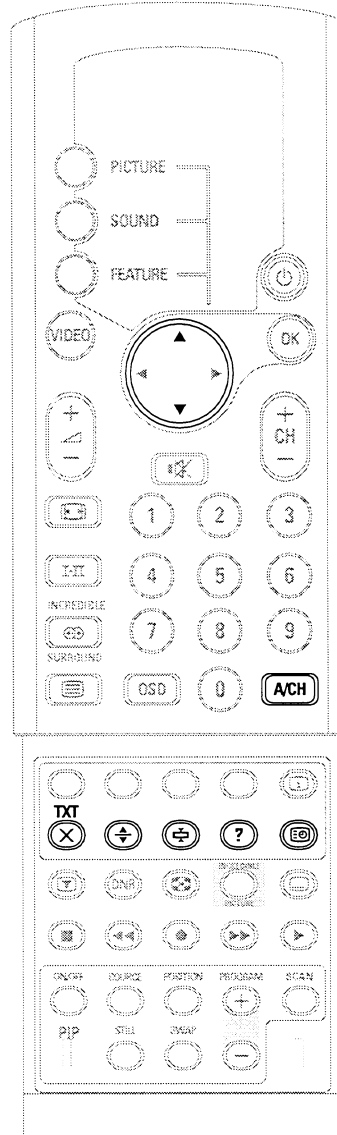
- ① Press button to reveal concealed information such as solutions to riddles and puzzles.
- ② Press button to conceal information again.

Call up a subpage or time display

- ① Enter a teletext page number which has subpages.
- ② Press button.
- ③ Enter the desired subpage with digit buttons e.g. 0003 for the third page of 5 subpages.
What you enter appears on the top left hand corner of the screen. The subpage will appear on the screen as soon as it is located.
- ④ Press button to quit.

You can also use this button to call up the time display (only on channels that are broadcasting teletext) when you are in the television mode.

- ① Press button to switch on the time display.
The time is displayed on the top left hand corner.
- ② Press button to switch off the display.



English




... teletext

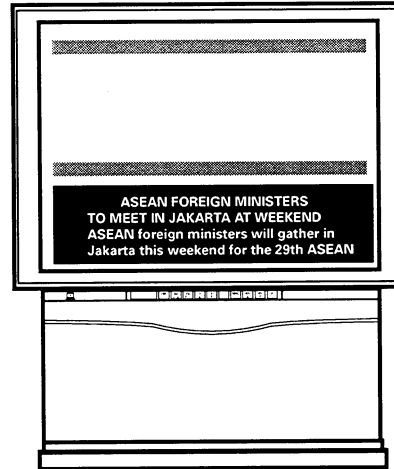
To store "Personal" pages

You are able to store up to 4 pages on the colour keys (1 page on 1 colour key). To do this, you need to be in Teletext mode.

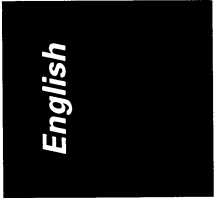
① Select a teletext page (e.g. 800).

② Press the **OK** button.
A message line "Press colour key to store" appears.

③ Press any of the 4 coloured buttons (e.g. red) in which you want to store the page.
A message line "Page stored in red key" appears to confirm that you have already stored the page in the designated colour button.
If you wish to store pages in the remaining 3 coloured buttons, repeat steps 1 to 3. To exit, press the  button twice.



News ON Demand



To call up "Personal" pages (only works in TV mode)

① Press the respective coloured button to call up the stored page.
The page is displayed in "News On Demand" mode.

Note : If your pre-stored teletext page in the colour key belongs to another channel, the TV will switch channels when you press the colour key.


② Press the **OK** button to return to the last viewed channel.

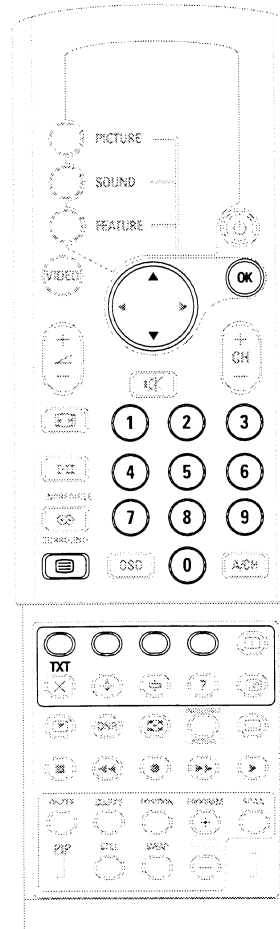
News ON Demand

If you are in teletext mode,

Press the  button once.

If you are in TV mode,

Press the  button twice.
The contents of the teletext page appear in 4 lines at the bottom, leaving the rest of the screen free for watching the TV programme.
*Press either the **▲** or **▼** button to scroll and view the rest of the page.*







Subtitle Txt

TV channels which broadcast teletext often transmit certain programmes with subtitling for the hearing impaired.

① Switch on the Teletext index page to check for a page number which contains subtitle information; select it.

② Press the  button once. "subtitle stored" appears on the first information line of the Teletext page.

③ Exit from Teletext.

④ Press the  button to switch on the subtitles transmitted by the broadcaster. "Subtitle Txt ON" appears momentarily and the subtitles will come onto the screen.

First information line

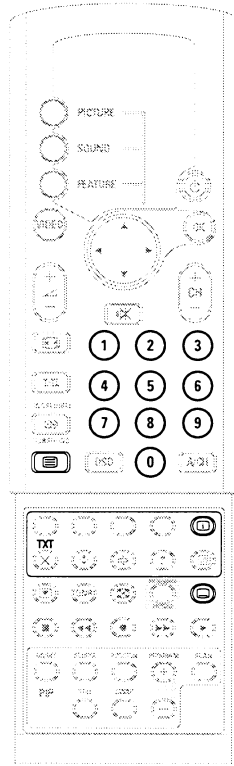
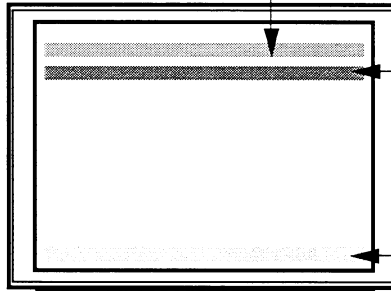
If a selected teletext page contains subpages, the page number will appear here. The coloured number indicates the displayed subpage. The white number refers to the subpages, which are selectable with the ◀ or ▶ button.

Second information line

Contains the name of the TV channel, the page counter, date, and time.

Option line

Contains colours indicating the corresponding colour button to use for fast access to information.

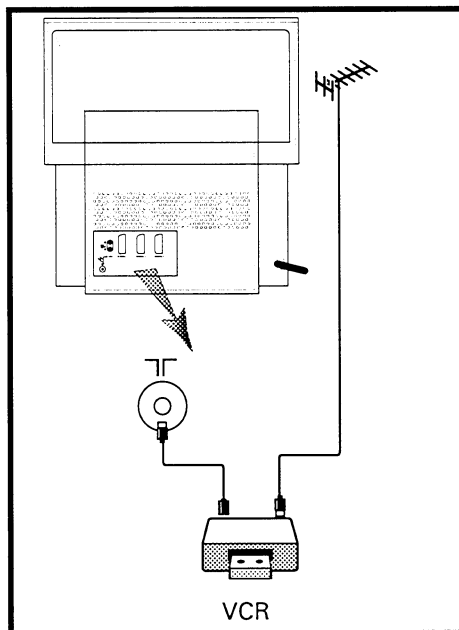
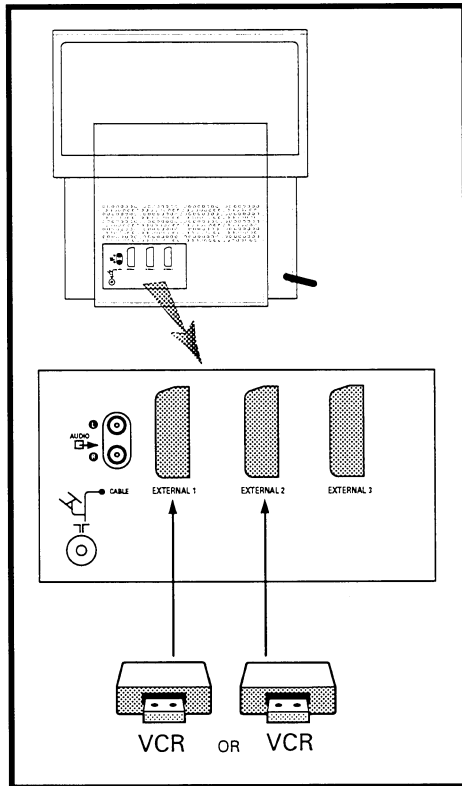


English



Connecting other equipment

Equipment such as a VCR, Laser disc player, CD-I, etc. could be connected to the back sockets of the TV. Switch off the TV and equipment before making any connection.



Playback from VCR

- a) Connect a eurocable to either the EXT 1 or the EXT 2 terminal on the back of the TV and to the appropriate output terminal on the VCR.

If you connected the VCR to EXT 1, press the VIDEO button on the remote control repeatedly to select either EXT 1 CVBS or EXT 1 RGB, whichever is available on your TV.

If you connected the VCR to EXT 2, press the VIDEO button repeatedly to select EXT 2 CVBS or EXT 2 RGB, whichever is available on your TV.

OR

- b) Connect the Antenna or Cable signal to the VCR's "Antenna In" jack. Then, connect the "Out to TV" jack of the VCR to the "Cable In" jack of the TV.

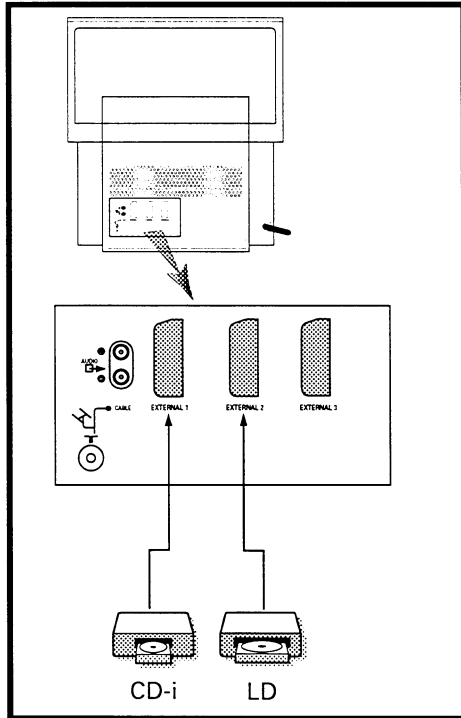
The VCR is now considered a TV channel by the TV. You must tune into the VCR's test signal and assign the channel 0 to it. For further information on the test signal, refer to the VCR's instruction manual. Select the channel 0 to view the playback picture.

English



... connecting other equipment

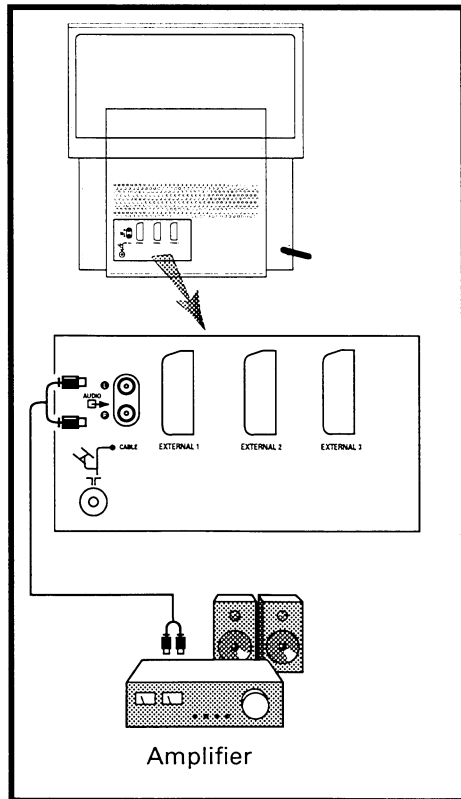
English



Playback from Laser disc player, CD-i, etc.

Use a eurocable to connect the equipment to the EXT 1 or EXT 2 terminal on the back of the TV.

- Press the VIDEO button on the remote control to select EXT 1 RGB or EXT 1 CVBS (whichever is available on your TV) if you connected the equipment to the EXT 1 terminal. Press the VIDEO button to select EXT 2 RGB or EXT 2 CVBS (whichever is available on your TV) if you connected the equipment to the EXT 2 terminal.



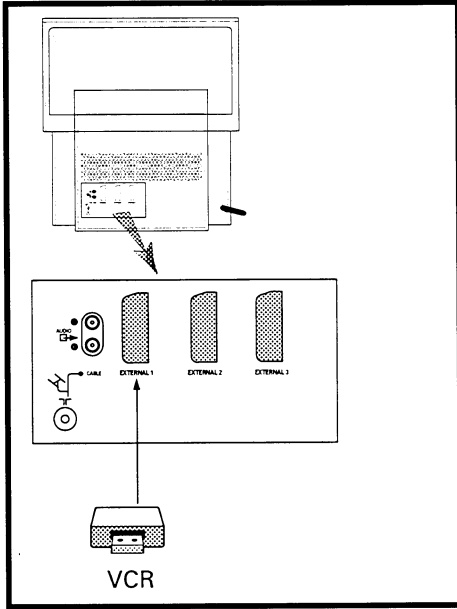
Amplifier connection

Connect an audio cable to the Left and Right Audio Out terminals on the back of the TV and to the Left and Right Audio In terminals on the amplifier.

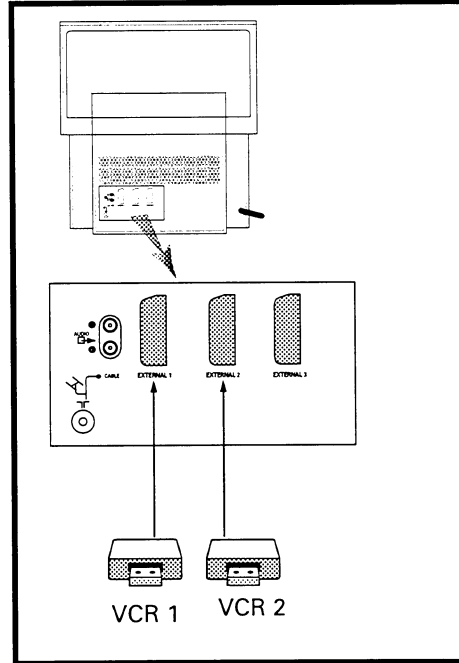


... connecting other equipment

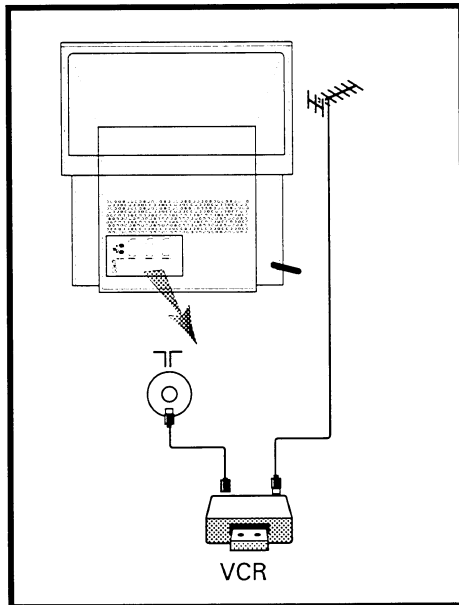
Recording



TV programme on the channel you are watching. Connect VCR to "EXT 1."



Programme from one VCR (e.g. VCR 1) to another VCR (e.g. VCR 2).



TV programme directly from the antenna. You do not need to watch the programme at the same time.

English



Frequency tables

Table 1 – C.C.I.R. Channel Frequency

Channel No.	Picture Freq. (MHz)	Channel No.	Picture Freq. (MHz)	Channel No.	Picture Freq. (MHz)
2	48.25	30	543.25	50	703.25
3	55.25	31	551.25	51	711.25
4	62.25	32	559.25	52	719.25
5	175.25	33	567.25	53	727.25
6	182.25	34	575.25	54	735.25
7	189.25	35	583.25	55	743.25
8	196.25	36	591.25	56	751.25
9	203.25	37	599.25	57	759.25
10	210.25	38	607.25	58	767.25
11	217.25	39	615.25	59	775.25
12	224.25	40	623.25	60	783.25
21	471.25	41	631.25	61	791.25
22	479.25	42	639.25	62	799.25
23	487.25	43	647.25	63	807.25
24	495.25	44	655.25	64	815.25
25	503.25	45	663.25	65	823.25
26	511.25	46	671.25	66	831.25
27	519.25	47	679.25	67	839.25
28	527.25	48	687.25	68	847.25
29	535.25	49	695.25	69	855.25

English



Table 2 – NTSC (Cable transmission)

Channel No.	Picture Freq. (MHz)	Channel No.	Picture Freq.(MHz)	Channel No.	Picture Freq. (MHz)
2 23	55.25	K	223.25	PP 52	391.25
3 24	61.25	L	229.25	QQ 53	397.25
4 25	67.25	M	235.25	RR 54	403.25
5A 26	73.25	N	241.25	SS 55	409.25
5 27	77.25	C	247.25	TT 56	415.25
6 28	83.25	P	253.25	UU 57	421.25
A-5 29	91.25	G	259.25	VV 58	427.25
A-4 30	97.25	R	265.25	WW 59	433.25
A-3 31	103.25	S	271.25	AAA 60	439.25
A-2 32	109.25	T	277.25	BBB 61	445.25
A-1 33	115.25	U	283.25	CCC 62	451.25
A 34	121.25	V	289.25	DDD 63	457.25
B 35	127.25	W	295.25	EEE 64	463.25
C 36	133.25	AA	301.25	65	469.25
D 37	139.25	BB 38	307.25	66	475.25
E 38	145.25	CC 39	313.25	67	481.25
F 39	151.25	DD 40	319.25	68	487.25
G 40	157.25	EE 41	325.25	69	493.25
H 41	163.25	FF 42	331.25	70	499.25
I 42	169.25	GG 43	337.25	71	505.25
7 43	175.25	HH 44	343.25	72	511.25
8	181.25	II 45	349.25	73	517.25
9	187.25	JJ 46	355.25	74	523.25
10	193.25	KK 47	361.25	75	529.25
11	199.25	LL 48	367.25	76	535.25
12	205.25	MM 49	373.25	77	541.25
13	211.25	NN 50	379.25		
J	217.25	OO 51	385.25		

English



Table 3 – NTSC (Terrestrial transmission)

Channel No.	Picture Freq. (MHz)	Channel No.	Picture Freq. (MHz)	Channel No.	Picture Freq. (MHz)
2	55.25	30	567.25	58	735.25
3	61.25	31	573.25	59	741.25
4	67.25	32	579.25	60	747.25
5	77.25	33	585.25	61	753.25
6	83.25	34	591.25	62	759.25
7	175.25	35	597.25	63	765.25
8	181.25	36	603.25	64	771.25
9	187.25	37	609.25	65	777.25
10	193.25	38	615.25	66	783.25
11	199.25	39	621.25	67	789.25
12	205.25	40	627.25	68	795.25
13	211.25	41	633.25	69	801.25
14	471.25	42	639.25	70	807.25
15	477.25	43	645.25	71	813.25
16	483.25	44	651.25	72	819.25
17	489.25	45	657.25	73	825.25
18	495.25	46	663.25	74	831.25
19	501.25	47	669.25	75	837.25
20	507.25	48	675.25	76	843.25
21	513.25	49	681.25	77	849.25
22	519.25	50	687.25	78	855.25
23	525.25	51	693.25	79	861.25
24	531.25	52	699.25	80	867.25
25	537.25	53	705.25	81	873.25
26	543.25	54	711.25	82	879.25
27	549.25	55	717.25	83	885.25
28	555.25	56	723.25		
29	561.25	57	729.25		



Specifications

Model no :	48UP91/48WP91/48EP91
Screen viewing area	122 cm
TV System	PAL/SECAM B/G/D/K, PAL I, NTSC M (3.58-4.5)
Playback	PAL 4.43, SECAM, NTSC 3.58, NTSC 4.43
Sound Transmission System	NICAM and 2CS Stereo
Channel Selection	VHF (I, III) and UHF with 99 pre-selections, S band & Hyperband Cable TV
Antenna input	75 ohms coaxial
Video Connections Back sockets - Ext 1 - Ext 2 - Ext 3 - Audio out	SCART Eurocable connector SCART Eurocable connector SCART Eurocable connector 2 x Audio
Audio Output	2 x 15 W rms
Internal speakers - Tweeter - Woofer	2 x 5 cm 2 x 13 cm
Main Voltage, Frequency	220 - 240 V ~ , 50 - 60 Hz
Power Consumption	270 W
Dimensions (Approx.) - Width - Height - Depth	104 cm 141 cm 57 cm
Weight (Approx. and excluding packaging)	94 kg

English

Note : Specifications are subject to change without notification.

